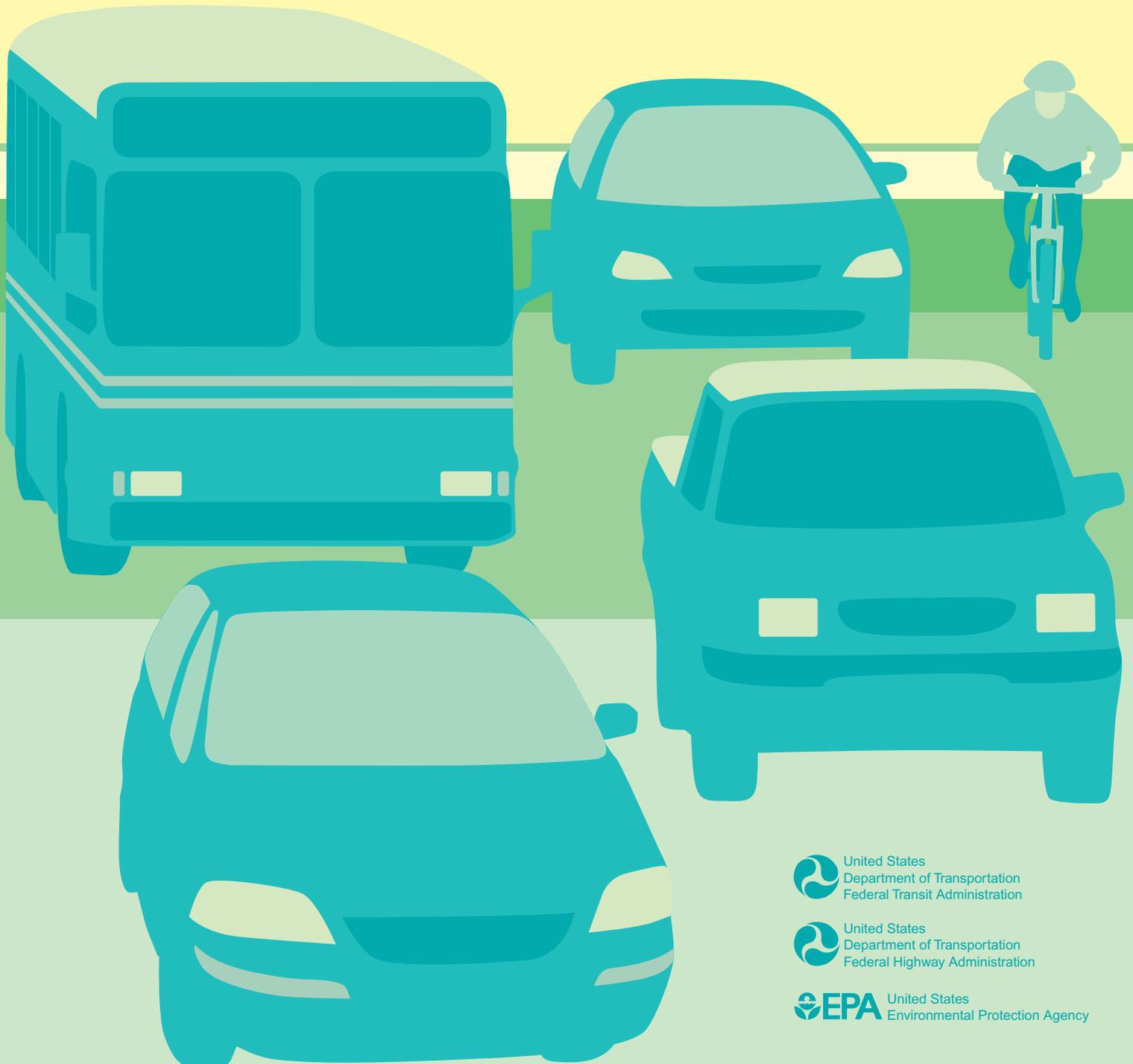


# Commuter Choice Primer

An Employer's Guide to Implementing Effective Commuter Choice Programs

Commuter Choice Primer



 United States  
Department of Transportation  
Federal Transit Administration

 United States  
Department of Transportation  
Federal Highway Administration

 EPA United States  
Environmental Protection Agency

# Commuter Choice Primer

## An Employer's Guide to Implementing Effective Commuter Choice Programs

### FOREWORD

Several handbooks and guidance documents currently exist to assist employers in developing and implementing Transportation Demand Management (TDM) programs. Many employers also provide Commuter Choice tax benefits to employees who ride transit or commute in vanpools. Recently, the federal agencies involved in Commuter Choice have redefined the program to encompass more than tax benefits. Commuter Choice now includes employer efforts to expand the full spectrum of choices available to commuters, including how employees travel to work (mode choice), when they travel (time choice), where they work (location choice), and even which way they travel (route choice).

The Commuter Choice Decision Support System (CCDSS) software enclosed on the back cover of this document has been developed to assist anyone given the task of exploring how Commuter Choice may alleviate various worksite problems (such as employee recruitment or parking shortages) or how it may offer a new, popular benefit to employees. When Commuter Choice is used to solve worksite problems, not only do employers and employees benefit, but society as a whole benefits through reductions in traffic congestion, air pollution, and energy consumption as well as a reduction in lost productivity from workers stuck in traffic.

The information contained within this guidance manual is meant to aid with this exploration. More detailed guidance is available on various aspects of Commuter Choice program implementation and is referenced in this document and the Decision Support System.

We hope the guidance is informative and helpful to you in your consideration of a Commuter Choice program, now more than ever...America's Way to Work.

### ACKNOWLEDGMENTS

This project was sponsored by the Federal Highway Administration (FHWA).

The development of *Commuter Choice Primer: An Employer's Guide to Implementing Effective Commuter Choice Programs* and the accompanying CCDSS was coordinated by the firm of ESTC, with assistance from Science Applications International Corporation (SAIC). Thanks are also extended to all who reviewed and commented on early versions of the report and CCDSS, especially the assistance of the Washington Metropolitan Council of Governments Commuter Connections program and the Association for Commuter Transportation (ACT).

### DISCLAIMER

This document is disseminated under the sponsorship of the Department of Transportation in the interest of information exchange. The United States Government assumes no liability for its contents or use thereof.



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# Section

Introduction and Purpose

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# Section 1

## Introduction and Purpose

### WHAT IS COMMUTER CHOICE?

Commuter Choice is a nationwide initiative encouraging employers to offer a broad range of commuting options to their employees. This means expanding the choices available for employees to get to and accomplish their work, whether they are transportation options such as public transportation, bicycles, carpools, modified work schedules, or technology options such as telecommuting that change how work is done.

Initiated by the U.S. Department of Transportation (DOT) and the U.S. Environmental Protection Agency (EPA), the goal of Commuter Choice is to expand the availability of commute options as a viable means of addressing growth-related issues impacting our communities.

More specifically, Commuter Choice is:

- A government/business/community **partnership** designed to motivate employers nationwide to offer commuter choices.
- A **voluntary initiative** motivating employers to offer a broader range of commute options to employees through services, work options, benefit programs or other business decisions.
- A **benefit to employees** that enhances their quality of life by making “getting to work” easier, more affordable, and more employee-friendly (i.e., sensitive to commute and lifestyle demands and needs).
- A **benefit to communities** to help achieve livability, sustainability, and mobility.

Commuter Choice covers a range of options that employers can use to encourage employees to choose an alternative to driving alone in peak travel periods. Options include when, how, where, and even whether to travel on work related trips. These options are categorized into four commuter choices:

1. **Mode Choice** — How to commute
2. **Time Choice** — When and how fast to commute
3. **Location Choice** — Where to commute and whether to commute
4. **Route Choice** — Which way to commute

These choices recognize that each employer, each worksite, and each employee has different needs and characteristics. Many commuters today cannot or will not change “how” they get to work. Yet they still have to make choices as to when they travel and the route they take. This is why the choices are broad based to allow an employer to customize a Commuter Choice program to meet their specific needs.

### WHY IS THE INITIATIVE TARGETED AT EMPLOYERS?

Throughout the country, in communities large and small, traffic congestion is getting worse. Employees are spending more time stuck in traffic while commuting to and from work. This congestion is taking a toll on employee productivity, health, and morale. Ultimately, these impacts are felt by their employers.

Historically, government agencies have focused more on addressing increased congestion through providing additional infrastructure (road investments) and through regulatory approaches rather than on how the infrastructure is used. While more capacity may still be added in some areas, what is also needed now are multi-organizational partnerships with employers to help manage travel demand through incentives and voluntary actions, for example, Transportation Management Associations (TMAs) and/or employers working with transit agencies to provide discounted transit passes.

Employee travel behavior can be influenced most effectively through employer actions. Work locations, schedules, parking availability and cost, access to public transportation, on-site services such as daycare/dependent care, and convenience stores can directly affect an employee's commuting choice and in turn the amount of travel and congestion.

## **WHY SHOULD EMPLOYERS BE INTERESTED IN COMMUTER CHOICE?**

Employers that have implemented these types of programs report a range of reasons or motivations for providing commute options to their employees. Some of the motivations are as simple as a desire to make their employees happy. Some motivators are more critical in times of low unemployment, when it is more difficult to attract and retain highly skilled workers. Other motivations have more of a "bottom line" justification, for example, a desire to increase worker productivity or reduce facility operating costs.

Some of the benefits of these programs are not easily quantifiable, such as improved employee morale that is observed by many employers after offering commuter choices. However, some benefits such as decreased demand for parking, increased productivity, decreased absenteeism, or decreased operating costs are quantifiable. In these cases, there is evidence showing how implementation of a Commuter Choice program has helped to accomplish specific worksite needs. Motivational factors are discussed further in Section 3.

## **WHO SHOULD USE THESE COMMUTER CHOICE GUIDANCE MATERIALS?**

*Commuter Choice Primer: An Employer's Guide to Implementing Worksite Programs* and the Commuter Choice Decision Support System (CCDSS) are designed to assist employers that are considering implementing a Commuter Choice program with determining those measures that might work best for their particular situation. This Primer is intended to be a concise, user-friendly reference guide to developing and implementing a worksite program. These tools provide an overview of all four Commuter Choice categories for employers to consider.

Employers considering a Commuter Choice program for the first time will benefit the most from this guidance because it provides the basic concepts for each commuter choice, including examples and cost/benefit factors for various commute options. The CCDSS software program walks the user through a series of questions about the worksite and employees. This information is then analyzed by the CCDSS to identify commute options that may be most appropriate for that specific employer based on the user's input to specific questions.

The CCDSS and this Commuter Choice Primer are primarily aimed at new employee transportation coordinators who are trying to develop or implement Commuter Choice programs for their particular company. But it will also be of value to mid-level managers within human resources or comparable departments that are responsible for commute-related issues. In addition, these materials will help higher level management understand the concept of Commuter Choice, how it affects their employees, and their bottom line. For example, Chief Financial Officers may be interested in how much a program may cost and what their return on investment may be.

Even though the CCDSS and this Commuter Choice Primer are designed to assist employers with starting a Commuter Choice program, it is also useful to those with existing programs. The CCDSS can be used to help identify new or enhanced strategies to make an existing program more effective. Employee transportation coordinators, or employees responsible for an established Commuter Choice program, can use these materials to redesign their program and/or estimate the benefits of their current programs.

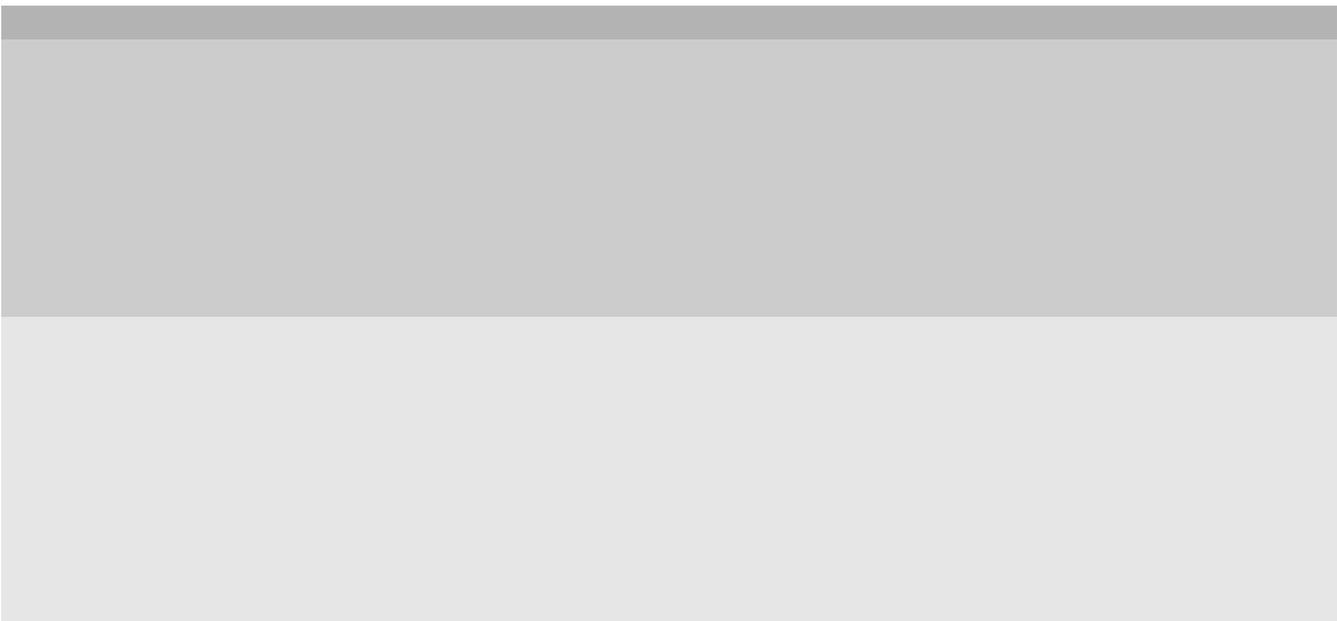
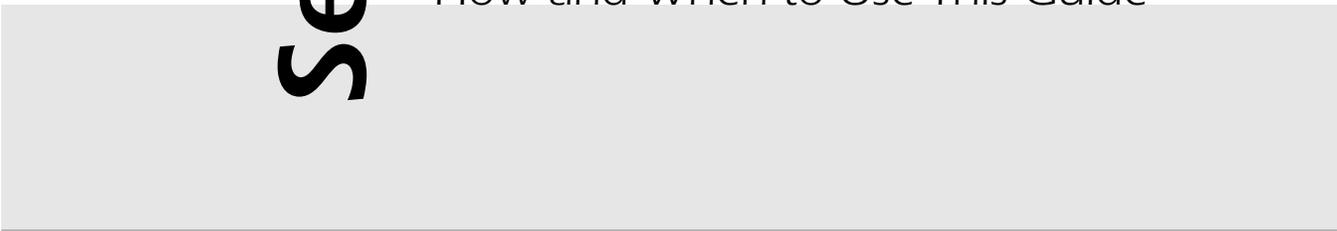
In addition, staff at local transportation organizations, such as rideshare agencies and TMAs may use the guidance documents to develop plans and estimate impacts for employers they are assisting.

The following sections of this report provide information on how to use these guidance tools, further information on the Commuter Choice concept, descriptions of the various commuter choice options, case studies, steps for getting started, and a list of additional resources. After reviewing the information in this report, proceed through the questions in the CCDSS to see how Commuter Choice may benefit your worksite.



# Section

How and When to Use This Guide



## Section 2

### How and When to Use This Guide

Two guidance tools are provided to assist in the development of effective worksite Commuter Choice programs: the CCDSS and this *Commuter Choice Primer*. The following section describes how and when to use each of these tools. Read this document prior to using the CCDSS to gain the full perspective of the system.

#### **WHEN TO USE THE COMMUTER CHOICE DECISION SUPPORT SYSTEM**

The CCDSS is an interactive software program used to identify Commuter Choice strategies that are most effective for a particular worksite. It is a quick start tool designed to help an employer develop an effective program by focusing on the appropriate commute options for the needs of their employees.

The CCDSS is a Windows-based program requiring Windows 95 or higher, a 4 X CD-ROM drive, and a monitor resolution of 800 X 600 at 16 bit color (thousands of colors). A 133 Mhz processor with at least 32 megabytes of random access memory (RAM) is recommended.

Employers that are trying to determine if a commuter program would be worthwhile for their site can use the CCDSS to determine potential benefits of a specific program. The CCDSS is also designed to be used by an employer who has already decided to start a program but is not sure what options to implement. By entering information about the worksite into the CCDSS, employers can obtain recommendations on specific strategies that may work best for their situation.

Because the CCDSS presents brief information for only the recommended strategies, use the Commuter Choice Primer to learn more about all of the Commuter Choice options. This document provides a more complete overview of all commute options, including more details about the strategies recommended by the CCDSS.

#### **WHEN TO USE THE COMMUTER CHOICE PRIMER**

This document is provided as a companion to the CCDSS. Although the CCDSS software is a quick start tool to help determine appropriate strategies for a specific worksite, this document provides more details about all options that can be considered for a worksite commute program. Additional information is provided about the Commuter Choice concept, the four option categories, motivators for employers and employees to participate in a commute option program, and situations that enable an employer to provide effective commute options.

It may be helpful to review the information in this document prior to completing the CCDSS tool. The complete overview of all the Commuter Choice options provided in this document will help to demonstrate how the selected strategies work together.

For example, if the CCDSS recommends the Mode Choice option of vanpooling, the user can refer back to this document to see what other Mode Choice options might be considered in addition to vanpooling. This report also provides further details on the vanpool option, such as information about different implementation strategies, known cost effectiveness, examples of how vanpooling has worked at other worksites, and tips for how to make vanpooling more effective. Detailed information is provided for each Commuter Choice option. Therefore, no matter what options are identified by the CCDSS, the user can refer to this Commuter Choice Primer to view additional options that may be considered.

Detailed case studies are also provided in this report that illustrate how various employers have integrated several commute options to create comprehensive and effective programs. These case studies may be used to provide ideas to other employers that may be amended for their specific needs.

Section 10 of this report provides a list of additional resources. Resources are categorized based on topic areas, such as mode, time, location and route choice information, cost effectiveness, and outside agency resources.

The following sections discuss:

- The conceptual framework of Commuter Choice
- Descriptions of the four choices, including mode, time, location, and route
- Summary of choices, including case studies from across the country
- Steps to selecting and implementing Commuter Choice strategies
- Reference guide for additional resources



# 3

## Section

Conceptual Framework for Commuter Choice

# Section 3

## Conceptual Framework for Commuter Choice

To better understand the broader definition of Commuter Choice, it is useful to describe a conceptual framework focused on the key components of Commuter Choice:

1. Mode Choice
2. Time Choice
3. Location Choice
4. Route Choice

Commuter Choice opportunities cover the range of options available to employers that may affect many aspects of employee travel behavior. There are supporting programs that **enable** the components of Commuter Choice to function more effectively. There are several

situations that act as **motivators** for employers to provide situations where the commuter's choice results in tangible benefits to the employee/employer and the overall community. The following sections of this document provide more details about "motivators" and "enablers" for the four Commuter Choice categories.

Many of these options are enumerated in the Commuter Choice Conceptual Framework shown in Figure 1. The framework suggests opportunities for affecting when, how, how fast, where, and even whether to travel on work-related trips. From left to right in Figure 1, each of the major choice options is addressed.

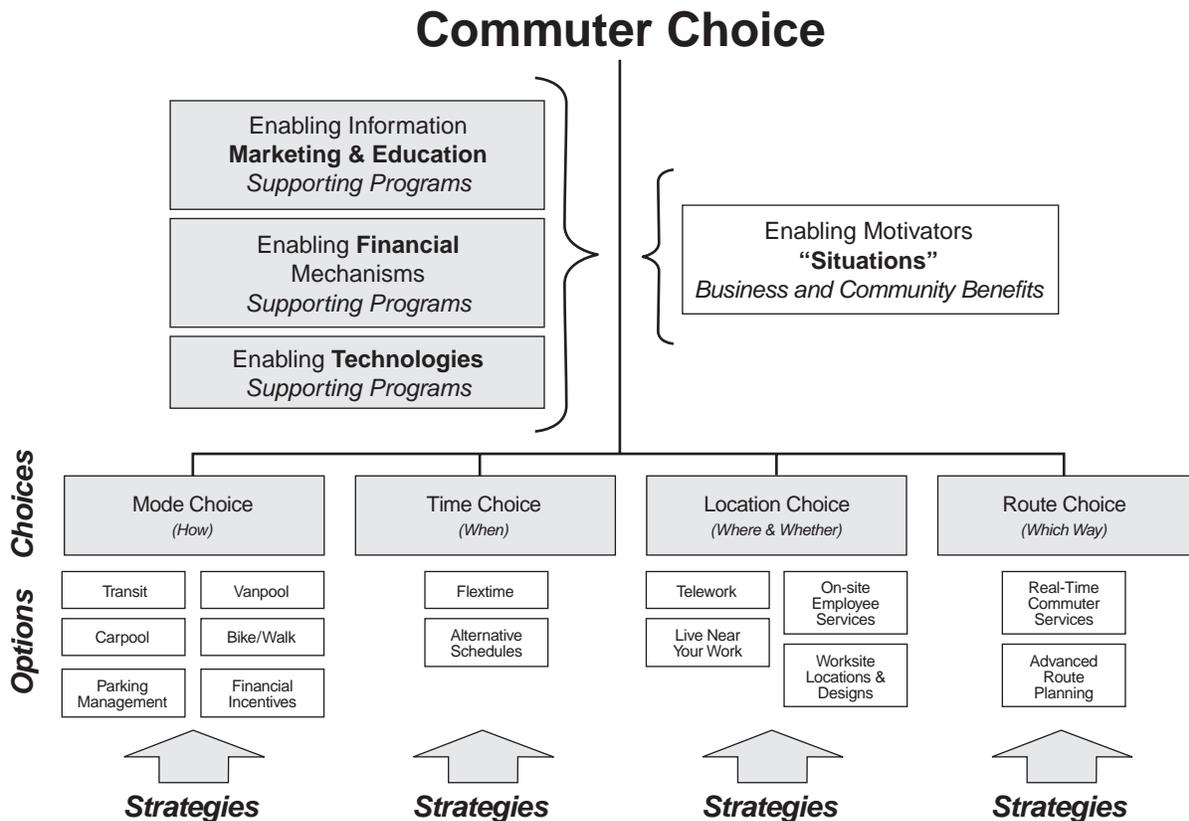
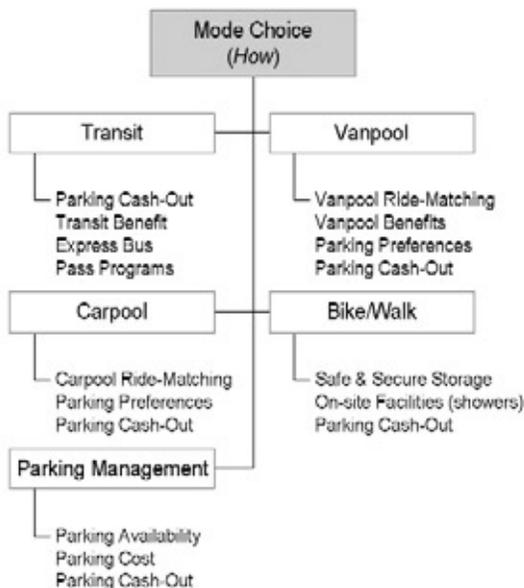


Figure 1. Commuter Choice Conceptual Framework

## MODE CHOICE

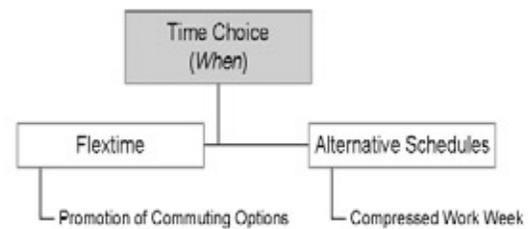
The **how** of commute travel deals with the variety of available transportation options and incentives for moving between “home” and “work” locations. Beneath each of the major categories under Mode Choice are some of the options available to employers that may influence employee travel behavior. Carpooling and vanpooling allow employees and family members to share a ride. Transit benefits and guaranteed ride programs may encourage employees to use public transportation, especially when parking is scarce or costly. Employers can also encourage non-vehicular travel by providing facilities that allow employees to walk, bike, or jog to work. The availability of parking and its associated costs are possibly one of the most influential factors in commuting to work. Employers providing strategies to their employees to offset the parking costs or avoid these costs all together will encourage the participation in commuting alternatives.



## TIME CHOICE

**When** employees “get to work” is a function of both mode and schedule. Employers that offer flex-time and alternative work schedules allow employees to plan their travel around peak commute times, thus reducing both travel time for the employee and peak period congestion for the community. Flex-time allows individuals to better juggle work and home life and thus create positive bene-

fits for employee and employer. Additionally, employers can decrease the time required for their employees to get to and from work by cooperating with other employers in high density employment centers to jointly provide [high speed express bus service to and from residential areas, shuttle buses to remote parking lots, and express lanes with express parking (e.g., closer or low cost) for employees who use commuter choices that help reduce congestion during peak periods.



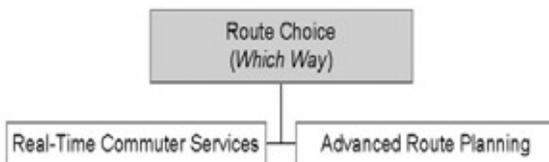
## LOCATION CHOICE

Technology and land use choices affect where and even whether an employee travels to work. Employers that encourage telework, either from home or telework centers, decrease the need for commuting and the commute distance. Employers with multiple locations can encourage employees to work in locations nearest where they live by providing appropriate financial incentives and flexibility to change job locations when an employee changes place of residence. Employers can also reduce requirements for “trip chaining” (making a trip for more than one reason) by offering on-site or nearby services that many employees need or want on a regular basis, such as day care/dependent care, convenience stores, laundry/dry cleaning, and food service. Similarly, employers can locate work places in areas where these services already exist so that employees are able to find the products and services they need with minimal additional travel.



## ROUTE CHOICE

The commute route choice is typically the result of necessity, experience, and current information. Employees take routes that get them where they need to go (including en route stops) based on experience over time that informs them of the most efficient way to get to and from their work locations. Occasionally, the travel route changes as a result of changing needs (e.g., “trip chaining”) or because of information about the condition of the route (e.g., incidents, work zones, special events, weather effects). Most often, employees get information from media sources (e.g., radio traffic reports, websites) or personal communication devices (cell phones). Employers can assist employees by providing information that helps them plan travel routes specific to their individual needs and current travel conditions. Additionally, employers may assist in linking employees to other employees who travel similar routes so that they can coordinate travel routes and schedules. As on-board vehicle navigation and communication technologies advance, many of these services may become generally available, and employers can encourage their use by subsidizing subscription costs or negotiating group rates on behalf of employees.

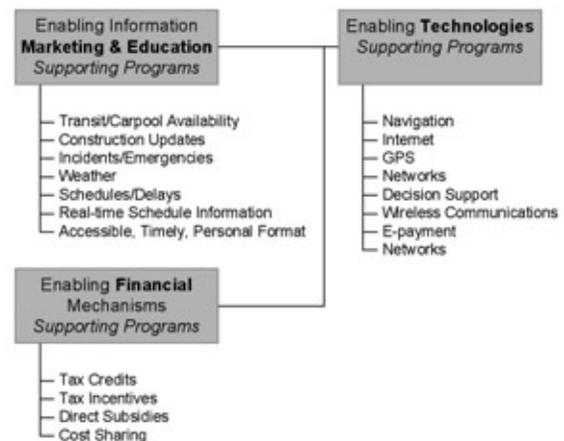


## ENABLERS

Most of the “commuter choice” options and strategies discussed in these materials can be implemented relatively quickly. However, widespread and effective use of these options can be encouraged and facilitated through enablers that make them more effective, efficient, and affordable. Clearly, **traveler information** is a key component of most of these choices, such as periodic updates of available services, coordination between employers and employees who wish to use some of the options, providing real-time information about travel conditions, or providing custom information to specific employees in response to individual travel needs. Information dissemination can be as simple as newsletters and

bulletin boards to advanced technology such as broadband wireless communications that deliver images as well as audio and text information to vehicles. The **enabling technologies** can provide position and navigation information and can offer decision support to optimize travel times based on individual criteria. Additionally, with electronic payment capability, travelers (or employers) can, in real time acquire travel services such as public transportation, parking, and traveler information.

**Financial mechanisms** can encourage both employers and employees to take advantage of commute options that address employer, employee, and community objectives. These can be in the form of financial incentives (transit pass subsidies, vanpool empty seat subsidies, etc.) and disincentives (charging for parking) that reward employees for using a commute alternative. Employers can enable commuters to use more commute options by providing shuttle services to and from transit stops and/or remote parking facilities, which could increase commuting options.



## EMPLOYER MOTIVATORS

As stated in Section II, employers report a range of motivations for providing commute options to their employees. Some of the motivations are due to bottom line company operating cost factors, and other motivators relate to quality of work life issues.

The following is a list of the more commonly reported employer benefits.

### **Enhanced Employee Recruitment and Retention**

Providing commute options helps employers recruit and retain employees. This may be especially true in areas with low unemployment or for employers in highly competitive job markets. Some firms have reported that programs such as telecommuting, compressed work weeks, and subsidized transit and vanpool fares give them an edge when hiring.

### **Improved Working Conditions for Employees**

Companies genuinely care about the morale and work-life balance of their employees.<sup>1</sup> Programs such as telecommuting, compressed work weeks, and flex time can make it easier for employees to juggle their personal and work lives. These kinds of programs can go a long way to fostering good relationships between employees and their employer. These relationships can have definite benefits, whether tangible or intangible, to the company.

### **Reduced Operating Costs**

Some firms can reduce operating costs by compressing a 40-hour work week into 4 days instead of the usual 5 days, thus reducing facility operating costs. Allowing employees to telecommute can also result in a reduction of facility expenses, such as office space.

### **Increased Productivity**

A 1998 study in Union County, NJ have reported increased productivity after the implementation of Commuter Choice measures. This may be due to a number of reasons. It could be as simple as an increased sense of loyalty to the organization on the part of the employee. It could be due to a reduction in stress from avoiding the morning rush hour or due to employees spending less time during the day worrying about how they are going to manage to leave work on time and still meet all of their personal responsibilities.

### **Reduced Need for Parking**

From the employer's perspective, parking demand is one of the main motivations for a Commuter Choice program, especially for those with limited parking. Lack of parking can be a problem for businesses located in central business districts, as well as for businesses located in suburban office parks.

### **Improved Public Reputation/Image**

Some corporations are concerned about the impact they have on the surrounding community. Communities are increasingly concerned about the behavior of their corporate citizens. Commuter Choice represents a way for corporations to play a more community-friendly role by helping reduce traffic congestion around their worksite, giving local employees options and some degree of flexibility in how they get to and from work, encouraging employees to live near where they work, walk or bike to work, and subsidizing the cost of commuting.

### **Improved Environment**

Implementing a Commuter Choice program clearly contributes to an improved environment by reducing auto emissions, reducing roadway congestion, and conserving energy.

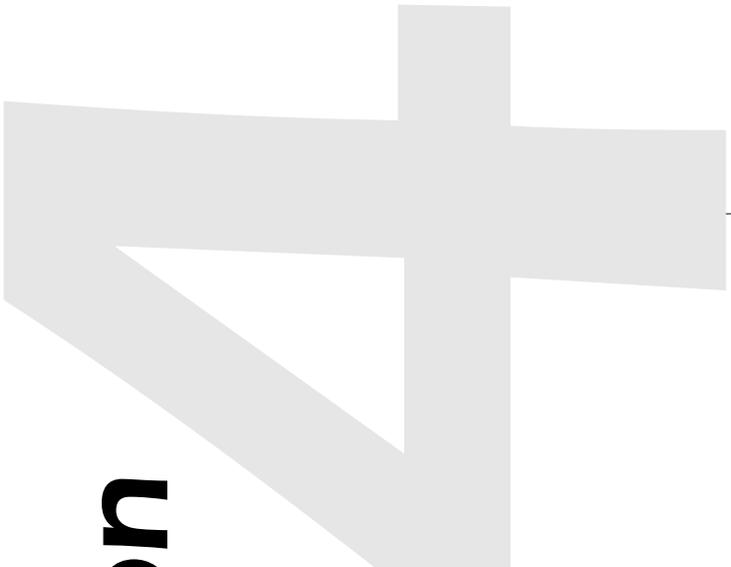
### **Improved Accessibility to Worksite**

Another motivation is the improved accessibility to the worksite afforded by increased or improved alternatives, such as transit, bikeways, and sidewalks.

## Tax Incentives

Recent changes in the Internal Revenue Code allow employers to offer their employees a wider range of tax-free commute benefits under the Commuter Choice tax benefits provisions. These programs are financial incentives to employees, usually encouraging them to change from driving alone to taking transit or vanpooling. There are several ways that the benefit can be provided to the employee. The employer can provide transit or vanpool passes or vouchers to employees tax free in addition to their existing salary. Employers deduct the cost of the benefit from their corporate income taxes. The benefit is free from all federal income and payroll taxes to the employee because the passes and vouchers are treated as tax-free fringe benefits rather than a taxable salary.

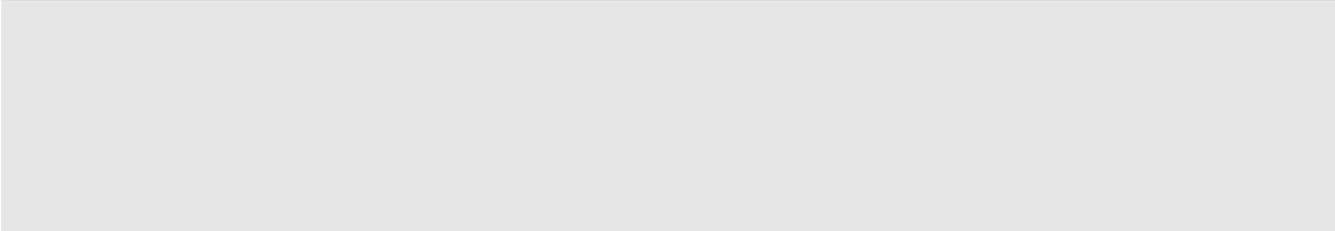
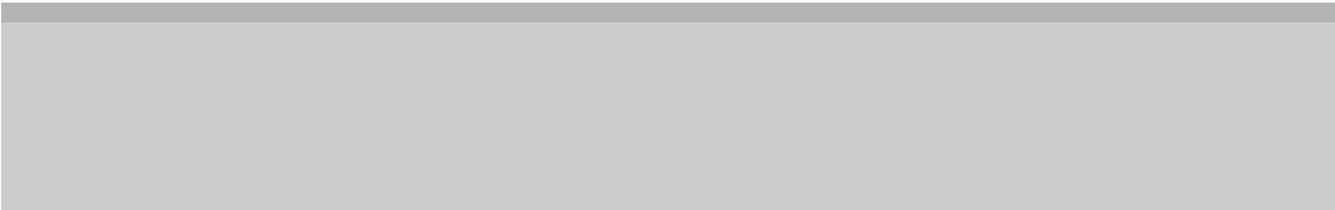
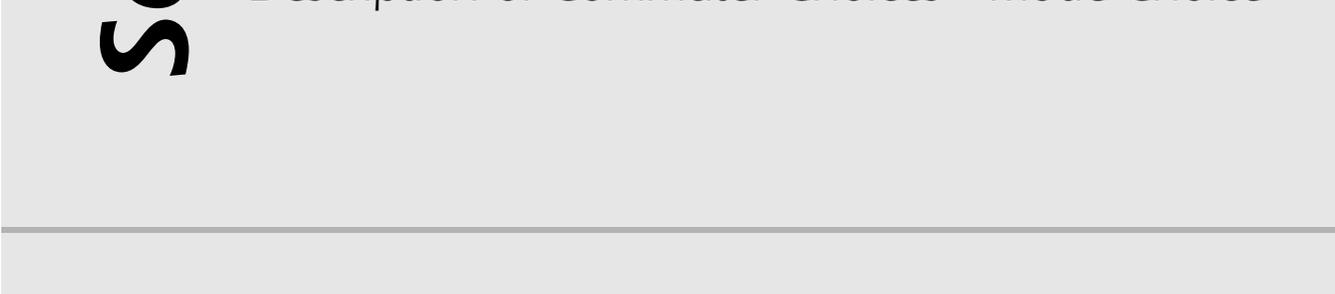
The benefit can also be provided on a “pre-tax” basis. In this scenario, the employee’s actual transit or vanpool cost up to \$100 per month is deducted from the employee’s pay. The employer then uses these funds to purchase a transit or vanpool pass or voucher on behalf of the employee. The employee’s taxable income is reduced, thereby saving payroll taxes for both the employee and employer and income taxes for the employee.



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# Section

Description of Commuter Choices—Mode Choice



## Section 4:

# Description of Commuter Choices—Mode Choice

### DESCRIPTION

Traditionally, the most common choice for any commuter has been mode choice. Mode choice refers to the way in which employees travel. The most prevalent and popular mode, used by four out of five commuters in the United States, is driving alone in one's own car. Options for providing choices to commuters who drive alone are discussed in later sections. However, by inducing employees to share rides or not use a vehicle at all, the number of cars arriving and parking at the worksite can be reduced. This reduction can alleviate parking shortages, improve access for customers and visitors, and save employers money otherwise spent accommodating cars at the worksite. Additionally, mode choices offer employees options on **how** they get to work. Not all employees can **or want to** drive to work every day. Some employees prefer to let someone else drive so they can relax or to save money and wear and tear on their own cars.

### OPTIONS

Several mode choice options exist that either offer employees another way to get to work or persuade drive-alone commuters to switch to another mode of travel.

**Transit**—In areas where bus, train, or ferry service is available and convenient for commuting, some employees choose to ride transit. Many regions of the United States have commuter express services that are designed to bring employees from centralized pick-up points in or near residential areas to major employment centers. Employer strategies to induce transit use include parking cash-out, employee transit benefits, and on-site transit pass sales or distribution.

**Carpooling**—Carpooling can be as simple as two employees or neighbors who live near one another sharing the ride to work on an informal basis. When two or more commuters share a ride in a car, they are carpooling. Employers can assist in the formation of carpools by

matching employees who live near each other into groups that may be able to share a ride. Employer strategies to encourage carpooling include ride-matching, preferential parking, and parking cash-out.

**Vanpooling**—When the number of commuters sharing a ride exceeds six, a larger vehicle is required, in the form of a vanpool. Most vanpools in the United States have 7–15 riders, with 1 or 2 agreeing to drive the van every day. Employers or employees can own the van or lease the van from a “third party” vendor. Vanpooling tends to work best for commutes of at least 25 miles or more each way. Employer strategies to encourage vanpooling include ride-matching, preferential parking, vanpool benefits, and parking cash-out.

**Bicycling and Walking**—For a limited number of employees, walking or riding a bike to work is an option. Some employees choose these options for health reasons. Although weather and terrain can affect employees' desire to try the non-motorized option, employers can support these modes in other ways, as described later. Employer strategies to encourage bicycling and walking include safe and secure storage for bicycles, shower and locker facilities, and parking cash-out.

**Parking Management**—Although not a mode option, managing the supply and price of parking can provide a tremendous incentive for using alternative modes. This motivation can provide a disincentive to driving alone: not enough parking, higher parking fees, a financial incentive for using other travel modes, preferential parking for carpool and vanpools, or discounts on parking fees are all factors that increase the desire to use an alternative mode.

**Financial Incentives**—Many employers prefer to use a “carrot” to entice drive alone employees to use an alternative mode rather than the “stick” of constrained parking. The carrot that is often needed to effect these

changes is direct financial incentive, or subsidy, for using other mode options. This incentive could be in the form of a discounted or free monthly transit pass or vanpool fare, or daily subsidies for each day that an employee uses an alternative mode. Some employers offer indirect financial incentives, such as additional time off or “points” redeemable for merchandise at area retailers.

## CONDITIONS AND BARRIERS

Carpooling, bicycling, and walking options are readily available to any employee and are often adopted without any assistance from the employer. Carpooling tends to be the option selected by more employees than any other. Perhaps this is because sharing a ride is perceived as less of a change in travel habits than riding the bus or a bike to work. Carpooling, bicycling, and walking can be made far more attractive if public facilities are in place to make commuting by these means easier. High Occupancy Vehicle (HOV) lanes on highways, also called carpool or diamond lanes, can offer carpoolers and vanpoolers a time savings over using regular lanes. Bicycle lanes can afford these commuters a safer and well-marked network of bike routes. Even good, well-connected sidewalk systems can make walking from home or the bus stop to work a better experience.

Vanpooling, on the other hand, requires a sufficient group of employees and assistance from the employer to get going. As stated earlier, vanpooling most often appeals to commuters who travel 25 miles each way or more daily. Vanpooling requires a commitment to a regular schedule and can involve extra commuting time to pick up or drop off riders. However, most vanpoolers cherish the time not spent behind the wheel and the ability to work or sleep while commuting.

Transit use not only requires that convenient, frequent services are available but that employees understand how to use the system and that schedules are coordinated to coincide with work hours.

The most significant barrier to switching travel modes seems to be employees’ need for their car before, during, or after work. Employees often drop off children at

school, run errands, or make business trips during the workday. In some cases, this need is probably best described as the sense of freedom and flexibility that comes with knowing your car is available when and where you want it. Supporting services, such as Guaranteed Ride Home, can help address this need.

## EMPLOYER STRATEGIES AND SUPPORTING SERVICES

Employers can greatly influence employees’ mode choice through a variety of supporting services aimed at making the options easier or cheaper to use:

### Commuter Choice Tax Benefits—

The Internal Revenue Code allows employers to offer their employees tax free commute benefits under the Commuter Choice tax benefits provisions. These programs are financial incentives to employees, usually encouraging them to switch from driving alone to **transit** or **vanpool**.

There are several ways that employers can provide this employee benefit, including an employer-paid program, pre-tax benefit, or a combination of the two. In an employer-paid program, the employer purchases a transit pass or voucher using company funds and provides it to the employee. The employer deducts the cost of the benefit from its corporate income taxes, and the benefit is free of all income and payroll taxes to the employee.

The benefit can also be provided on a “pre-tax” basis. For a pre-tax benefit, the employees’ share of the cost of the transit pass is deducted, before taxes, from their pay. Employees can deduct up to \$100 per month this way. The employer can contribute its share of the cost via the provision of vouchers that the employee can exchange for transit media or vanpool services. The employer deducts its share of the cost from its income taxes. The employees’ taxable income is reduced, which reduces the payroll taxes that the employer pays, as well as reducing the income taxes that the employee pays.

It is important to note that the total tax-free transit or vanpool benefit cannot exceed \$100 per month. For example, employees could elect a pre-tax deduction of

\$75 from their gross pay and the employer could contribute a company-paid pass worth \$25. The total would equal the maximum tax-free limit of \$100. The employee could not deduct \$100 pre-tax and the employer contribute a pass to the employee without the pass being subject to payroll and income taxes.

**Parking Cash-Out**—Parking cash-out refers to a commuter benefit that offers employees the option to accept taxable cash income, up to \$185 per month, instead of a free or subsidized parking space at work. This benefit gives the employee the choice of how to use the money, for parking or for a tax-free transit or vanpool voucher/ pass, or accept the balance of the cash-out in taxable cash. Free or subsidized parking makes it easier for employees to drive alone instead of considering the other options. If employees are given the cash instead of the parking, they may think twice about how to use that money.

**Rideshare Matching**—It will be necessary to have a way of locating and matching potential carpoolers. There are several ways of matching carpoolers or vanpoolers:

- Create a “ride-match” bulletin board at the worksite where employees can post riders- or rides-wanted cards.
- Match potential riders using their home ZIP codes. Some companies use their personnel file records to create ZIP code listings. Very large companies sometimes create or purchase special software that matches employees by home locations and work hours. Groups of employees can get together in “meet your match” events.
- Register with a regional rideshare agency that provides this service for employers. These services are usually free.

**On-Site Information Center**—Although many employees will get information via newsletters, websites, and word-of-mouth, having an on-site information center can give visibility to the Commuter Choice program. This can be as simple as a bulletin board and information rack in or near the coordinator’s office. Here, transit schedules and routes, vanpool routes, upcoming events, and incentive programs can be publicized.

**Guaranteed Ride Home**—Provide emergency transportation for Commuter Choice program participants in case they have an emergency and cannot wait for their bus, train, vanpool, or carpool to take them. This service will help to overcome one of the greatest concerns employees have about leaving their car at home. Experience has shown that these emergencies do not occur very often. Emergency transportation can be provided through the use of employer vehicles, rental cars, or taxis.

**Preferential Parking**—Parking preferences include strategies such as free parking passes and access to preferred parking locations. Preferential parking location is a convenience incentive that reserves the most desirable parking spaces for carpools. The more convenient the location, the greater the incentive. Plus, it may save employees time walking across a large parking lot. Preferred location can be proximity to the entrance or exit or a safe covered area of the parking lot.

**On-Site Facilities**—On-site facilities include physical improvements made to accommodate alternative mode users. These facilities include showers and lockers for those who walk or ride their bicycles to work, secure and safe bicycle storage on-site, transit stop improvements adjacent to the worksite, sidewalks from transit stops to entrances, and parking structures or covered parking that can accommodate vanpools. Other on-site amenities, such as cafeterias, are discussed in the Location Choice section.

**Promotion**—Employees need to know about the options and incentives offered. In addition to an on-site information center, the program can be promoted via articles in the organization’s employee newsletter, a page on a company benefits website, posters, and flyers. Additionally, events can be held periodically to recognize employees who are using alternative commute options and to educate other employees. An annual Commuter Choice fair or quarterly prize drawing can be effective.

**Shuttles**—If the transit stop or station is not within walking distance of the worksite, providing reliable shuttle service will make transit more convenient and will get employees to and from work on time. Shuttles can also be provided between buildings or to midday lunch sites.

## **SYNERGIES WITH OTHER CHOICES**

When carefully planned, mode options can work hand-in-hand with other options. If not, changes in work schedule (time choice) and work location (telecommute) can actually work to break up existing carpools and prompt people to drive alone more often. The key is to work with employees who are starting a compressed work week or telecommute option to support the use of alternative modes on days when they report to the worksite.

Having on-site services (such as a cafeteria or convenience services) can also alleviate some of the need for having a car available during the day to run errands or go to lunch. Locating the office near these services or in mixed office/retail developments can also address this issue.

## **KNOWN EFFECTIVENESS AND COST EFFECTIVENESS**

Several national studies have shown that employer support of alternative modes can result in a significant shift from drive alone to other modes. Many employer programs have reduced the number of cars coming to the worksite by up to 20% or even more in some cases.<sup>3</sup> However, the key to these successful programs seems to be:

- Offering incentives for using alternative modes
- Managing parking supply or price
- Targeting support and incentives to the options that make sense for the worksite

Providing information on the options, without supporting services and incentives, has not proved to be enough to cause employees to switch modes.

Studies have also shown that it costs employers about \$1–2 per day to get an employee to switch modes.<sup>4</sup>

Some employers use the parking charges of solo drivers to subsidize other modes, and some view these incentives as part of an overall benefits package.

There are several tools to help estimate the potential cost and benefits for a specific worksite. EPA's website [www.commuterchoice.gov](http://www.commuterchoice.gov) provides a calculator that allows employers to estimate financial savings (e.g., taxes, parking facilities, employee turnover) and the estimated traffic and air pollution that can be eliminated by implementing Commuter Choice strategies.

## **EXAMPLES—MODE CHOICE**

Numerous examples exist that describe employer programs that include mode choices. Many employers subsidize transit fares and promote carpooling. Below are examples of employer programs that include a comprehensive set of choices and a track record of success.

### **Georgia Power/The Southern Company (Atlanta, GA)**

Georgia Power offers a variety of modes and other options to help employees get to its downtown Atlanta headquarters location. The Smart Ride program includes transit and vanpool subsidies and carpool incentives. Established in 1997, the program now has 500 employees riding in 50 vanpools and 300 employees using transit. The company runs shuttles to the nearest transit station. Participants in the Smart Ride program can also check out electric cars for midday business needs and are registered for the regional Guaranteed Ride Home (GHR) program. Georgia Power also offers compressed work weeks, telework, and work at company locations closer to employees' homes.<sup>5</sup>

### **The Calvert Group (Bethesda, MD—Washington, DC, area)**

This company manages mutual fund investments from its location in a "suburban" downtown location on the Metro rail system. The Calvert Group started its program as an employee benefit and recruitment tool. Employees who use transit (bus, subway, and commuter rail) are subsidized for 100% of the cost of their pass. Employees who walk to work are reimbursed for a new pair of walking

shoes each year (up to \$140). Bicycle commuters receive \$350 toward the purchase of a bike. Employees who drive alone receive a **partial** subsidy for parking. As such, carpoolers can lease a single space and share in the costs. More than 25% of Calvert employees use a mode option other than driving alone. Current employees have cited the subsidies as an important part of their benefits package. The company benefits as well through enhanced recruitment to a larger pool of prospective employees and reduced turnover.<sup>6</sup>

### **Genencor International (Palo Alto, CA)**

This biotech firm in the San Francisco Bay Area has one of the lowest turnover rates in the industry (8.5% vs. 22%). This was partially accomplished with an aggressive commuter benefits program. Genencor provides Eco Passes (for unlimited use on Bay Area transit) and Commuter Checks (for vanpool fares). By doing so, one out of every three employees commutes via public transportation. During the day, employees can use a CarLink program, which makes cars available for medical appointments. Employees can also use company bicycles for local trips during the day. Those who commute by bicycle are provided with on-site bicycle lockers and racks. Overall, Genencor has successfully raised awareness and commitment among its employees via these benefits, yearly on-site transportation fairs, and available transit maps and schedules.<sup>7</sup>

### **Lufthansa AG (Hamburg, Germany)**

In what has been called the “most comprehensive company transportation program in Germany,” Lufthansa has offered Commuter Choices to 8,500 employees in northern Germany. Lufthansa offers mobility counseling to employees and, in so doing, has eliminated about 950 cars every day. The first component of this program is a company car-sharing program allowing flight crews to check out cars for commuting to and from the site. This eliminates a large number of employees’ cars from being parked on-site for days at a time. Throughout Germany, 15,000 Lufthansa employees participate in the car-sharing program. Employees are also provided subsidized transit tickets. This service has almost tripled the number of

employees using public transit (350 to 950 workers). Bicycle commuters and carpoolers are offered secure, close-in parking in the hanger area (700 commute by bicycle and 500 by carpool). Lufthansa promotes its program to make it highly visible within (and outside) the company. Lufthansa has also developed mobility counseling software that allows employees to tailor Commuter Choices to their particular needs.<sup>8</sup>

### **Merck (Rahway, NJ)**

In response to a state-wide mandate for Employee Commute Options programs by major employers, this pharmaceutical firm developed a comprehensive Commuter Choice program for its New Jersey research and development and manufacturing site. Merck encourages carpooling through preferential parking, ride-matching, and special promotions, such as monthly raffles for gift certificates. Merck provides a 50% subsidy to transit users and vanpoolers. It also operates a shuttle to a nearby commuter rail station and sells transit passes on-site. Employees who bicycle or walk can use showers and lockers provided on-site and receive a \$1 per day gift certificate that can be used for on-site services, such as dry cleaning, cafeteria, day care/dependent care, etc. This service has resulted in dramatic increases in alternative mode use—90% more carpoolers, 50% more vanpoolers, and a doubling of transit riders. Merck has noticed an increase in employee morale, and the program helps ease a parking shortage during the construction of a new building.<sup>9</sup>

## **TOP 11 TIPS—MODE CHOICE**

**1. Carrots Before Sticks**—Employees will respond better to incentives, such as discounted or free transit passes or vanpool subsidies to make the fare lower, than they will disincentives, such as parking charges.

**2. Part-Time Helps Too**—Employees who cannot use an alternative mode everyday can still participate 1 or 2 days per week when their personal situation allows. This practice still benefits the program because some employees will rideshare every day of the week.

**3. Personalize Service**—One-on-one assistance is always preferred if resources allow. Understanding an employee's personal situation can lead to the most appropriate options. For example, new vanpool groups take some time to organize, and personal attention to members of the group can be key to getting the vanpool on the road.

**4. Ask Employees**—Do not assume that you know what employees want or need. Talk to employees about what they think of various options. Organize a focus group to discuss what it would take to change their commuting habits. Survey employees. Ask for suggestions.

**5. Many Will Not Want to Participate**—Many employees simply cannot or will not try a different mode to get to work due to their personal situation or their insistence on using their cars. Do not get discouraged. Work with the segment of employees who might be willing to switch because they live a long distance from work, have used an alternative before, or are tired of fighting traffic.

**6. Get Groups Together to “Meet Your Match”**—Sometimes, getting groups of employees together for a brown bag lunch or coffee event can break down the impersonal barriers of sharing a ride with a stranger.

**7. Carpooling Is the Most Viable Option**—Carpooling is the easiest option for most employees to use. It simply requires two or three people agreeing to share a ride. Other options require more rigorous schedules or commitments.

**8. Include During New Employee Orientation**—Most people form their commuting habits within the first week of starting a new job. Assisting these new employees with personalized options can increase the chance that they will try something other than driving alone.

**9. Show Management Is Supportive**—Clear support from top management that Commuter Choice is important to the organization sends a strong message to all employees—this is especially true when senior-level managers use an alternative themselves.

**10. Build into Company Culture**—Employees who use alternative modes do not want to be perceived as different in any negative sense. Having to leave a meeting to catch a bus or vanpool should not be frowned upon. Clear policies on core hours for meetings is one example. Company policies and the general culture should embrace travel options.

**11. Do Not Skimp**—When installing bicycle storage or showers and lockers, provide quality, safe, clean, and appropriately sized facilities to reward employees for responsible commuting without their cars.

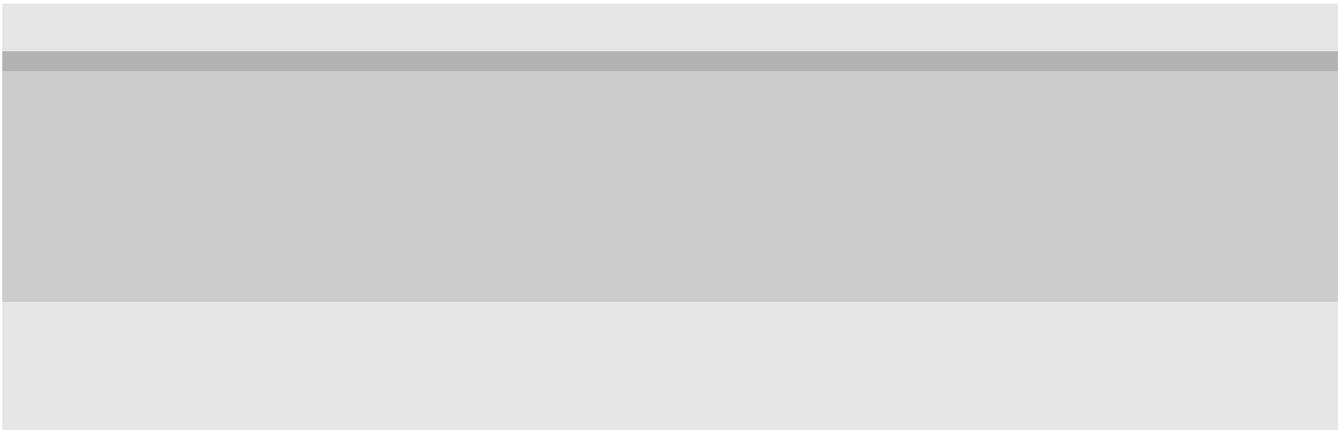
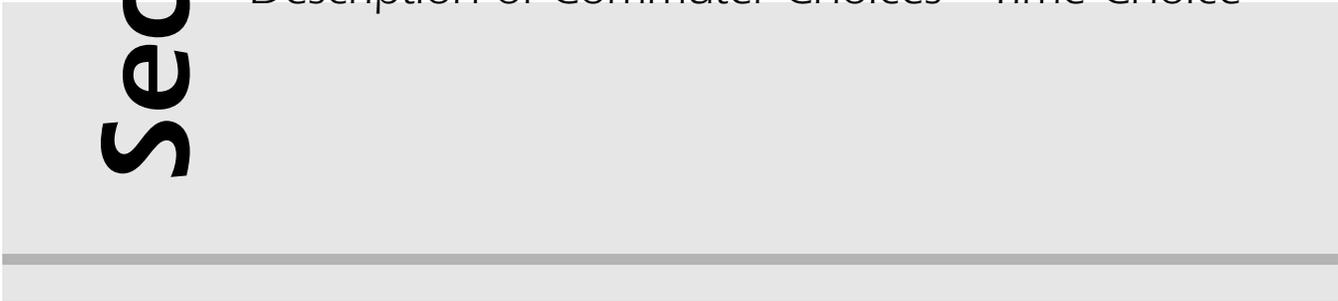
To determine if any of these Mode Choice strategies would work for your worksite, go to the CCDSS and complete the Interactive Guidance Tool.





# Section

Description of Commuter Choices—Time Choice



## Section 5

### Description of Commuter Choices—Time Choice

#### DESCRIPTION

Many commuters experiment with the time that they leave home or the hours they work to avoid the worst traffic congestion. Drive alone commuters and employees using other mode options can change the **when** of their commute. Sometimes, changing or providing for more flexible work hours helps family members or neighbors share a ride; in other instances, the change can discourage the use of alternatives (because transit and vanpool schedules are largely set). As such, these programs need to be carefully considered so that they complement other parts of your Commuter Choice program. In any event, employees tend to prefer these options because they allow for better management of personal time and responsibilities, such as family and outside activities.

#### OPTIONS

Two primary time choice options exist to offer employees starting and ending times that better fit their personal schedule: flex-time and alternative work schedules. It might be said that the 9 to 5 workday is a thing of the past. Employers and employees are finding that allowing employees to change when they commute can benefit both the employee (with reduced stress and the ability to juggle work and home better) and the employer (with less tardiness and more productive workers). Each option is defined below. More information is provided for each Time Choice Option and accompanying Employer Strategies in the CCDSS:

**Flex-Time**—Flexible work hours come in many forms. All forms allow employees to choose the schedule they work, within certain time boundaries. Some companies set core work hours, and employees can arrive and depart outside these hours as long as they work the required number of hours. In other cases, employees and their supervisors together select the work hours for each employee, based on work and personal needs. Flex-time can be offered to all employees, which is commonly done. However, some research suggests that flex-time available

to all employees tends to break up existing ridesharing arrangements because employees no longer need to report at the same time but can facilitate ridesharing among family and neighbors because they can now coordinate schedules. If the purpose is to complement the mode options, flex-time should be offered to non-drive alone employees only as an added incentive. If the goal is to allow greater flexibility for all employees to avoid traffic congestion, then offer flex-time to all.

**Alternative Work Schedules**—Just as flex-time is now very common with U.S. employers, more organizations are also implementing alternative work schedules. These schedules can include longer days with more time off or staggered shifts:

- **9/80 Compressed Work Week**— Employees work 80 hours over a 9 day period instead of 10. The typical work day is 9 hours.
- **4/40 Compressed Work Week**— Employees work a 40-hour week in 4 days instead of 5. The typical work day is 10 hours.
- **3/36 Compressed Work Week**— Common with health facilities, fire departments, and police, employees work 3 12-hour days.
- **Staggered Work Hours**—This strategy can help to reduce peak period traffic at the worksite by staggering the times when employees arrive and leave work so they do not all access the site at the same time.

Compressed work weeks remove a car from the road on the days that employees are off. Employees can use alternative modes on the days they do report to work. With longer days, however, some options, such as express buses, may not be as readily available. Staggered hours can significantly reduce bottlenecks at worksite entrances by staggering the proportion of workers who arrive at any one time.

## CONDITIONS AND BARRIERS

Flex-time does not, in and of itself, remove cars from the road or your parking lot. It can, however, move commuters to times of the morning and afternoon that are less congested. It can also encourage employees to use mode alternatives if planned properly. Compressed work weeks do remove vehicles from the roads and parking lots on employees' days off.

Do alternative work hour policies make sense for your worksite? One important consideration is that flex-time and alternative schedules are worksite operations policies that affect everyone. Flex-time often requires that meetings be confined to "core hours" of 9:30 a.m. to 3:30 p.m. Compressed work weeks require that the facility has longer operating hours, which can mean higher expenses for energy, maintenance, security, etc. More important, alternative work hour policies need to fit within the nature of the business or organization. For example, staggered shifts work well with retail and some manufacturing businesses. Compressed work weeks are often implemented at government sites and offices. Flex-time obviously does not work well at worksites with set schedules, such as educational institutions.

Therefore, think through the business ramifications of alternative work hours. If the nature of the business is conducive to schedule adjustments, employees like the added time it gives them to juggle their personal schedules. Before implementing a flex-time program, coordinate with several departments, including Human Resources and any union groups that may be represented at the worksite.

## SYNERGIES WITH OTHER CHOICES

When carefully planned, time choice options can work hand-in-hand with other options. However, as stated previously, changes in work schedule (time choice) and work location (telecommute) can actually work to break up existing carpools and prompt people to drive alone more often. Caution must be taken in implementing a new staggered work schedule. If you already have employees who are in carpools, in vanpools, or taking transit, changing their work schedules may break up these arrangements. Efforts should be made to allow some flexibility in start and stop times for these cases.

Time choice is often implemented with telework programs (Location Choice), allowing employees to work from home or other locations. Because alternative schedules require changes in work policies and worksite operations, some employers consider telework programs as part of an overall Alternative Work Arrangements policy that includes schedule and work location choices for employees.

## KNOWN EFFECTIVENESS AND COST EFFECTIVENESS

Alternative work hour programs are popular with employees and have been popular with employers looking to reduce the number of cars entering their worksite. In Washington State, where a Commute Trip Reduction rule applies to large employers in many parts of the state, 41% of employer worksites have chosen to comply with Compressed Work Week programs.<sup>10</sup>

Staggered work hour programs can dramatically relieve traffic jams into and out of areas when coordinated among employers in a given employment center (such as El Segundo, CA, or Hartford, CT). When employers in Hiroshima City, Japan, were asked by the city to coordinate and stagger work hours in 1994, the maximum back-up was reduced from 5.8 km to 4.9 km in the first few months and down to 3 km by 1997.

Some research has also shown that alternative work hour programs that afford employee time choices do not adversely affect mode choice if implemented properly. A case study with employees in Ventura County, CA, revealed an increase in carpooling from 8% to 13% during the implementation of flex-time and 4/40 and 9/80 compressed work weeks. More important to the employer, employee productivity and job satisfaction went up. Employees were better able to coordinate child care responsibilities, shorten their commute times, and even save money.<sup>11</sup>

There are several tools to help estimate the potential cost and benefits for a specific worksite. EPA's website [www.commuterchoice.gov](http://www.commuterchoice.gov) provides a calculator that allows employers to estimate financial savings (e.g., taxes, parking facilities, employee turnover) and the estimated traffic and air pollution that can be eliminated by implementing Commuter Choice strategies.

## **EXAMPLES—TIME CHOICE**

There are many good examples of alternative work schedules because the options are fairly common in the United States. What is interesting are the perceived and real benefits that both employees and employers experience.

### **Matsushita Kotobuki (Vancouver, WA)**

Matsushita Kotobuki Electronics Industries of America manufactures combination TV/VCRs under several brand names. In 1994, the firm implemented compressed work weeks for all its employees. Workers can work 4/40 (Monday–Thursday) or 3/36 (Friday–Sunday) schedules. When considering the program, the General Manager estimated that the program would save the company 15% in annual utility costs (for reduced production on Fridays), would increase productivity by 10%, and would allow for more overtime potential. Matsushita Kotobuki's Production Manager said, "Moving to compressed work weeks was a smart decision. It helped increase productivity and decrease absenteeism." By having two workforces (Monday–Thursday and Friday–Sunday), they have almost doubled their production capabilities. Overall, managers and supervisors report that morale is up and stress is down.<sup>12</sup>

### **The Bon Marché (Seattle, WA)**

Although variable work shifts are very common in the retail business, they are not as common in other types of work. However, as many as 80% of headquarters workers at the Bon Marché have flexible schedules, and half of its staff are on compressed work weeks. Because headquarters staff are at the site of the Bon Marché's downtown Seattle flagship store, compressed work weeks create more parking for shoppers. The firm introduced these employee benefits as a recruitment and retention tool in 1996 in a "hot" job market. Its research suggested that work hour options were third in prospective employee priorities after salary and medical benefits. A Senior Vice President of Human Resources said, "We've invested a lot in our people. When we offer work options, it's not totally unselfish. We know it results in more loyalty and less absenteeism."<sup>13</sup>

### **Defense Supply Center (Columbus, OH)**

The Defense Supply Center Columbus (DSCC), a military supply facility, offers its almost 2,500 employees Commuter Choices. In addition to flexible work schedules that stagger employee start and stop times, DSCC subsidizes vanpools and transit passes, provides preferential parking for carpools and vanpools, and provides information on all alternative modes. By participating in a Commuter Choice option, employees are given the opportunity to earn work hour credit to be used for additional days off.<sup>14</sup>

### **ARCO Products Company (Bellingham, WA)**

Some 95% of ARCO's Cherry Point Refinery employees use flex-time or compressed work weeks. Most production workers work 3/36 work weeks, and engineering staff work 9/80 work weeks. The company does not cite improved morale and reduced absenteeism as benefits, but the decrease in downtime to transition from one shift to another is seen as a major plus. The refinery also has a single two-lane access road on which traffic congestion has been reduced with flexible schedules. ARCO is so impressed with the results at Cherry Point that it is expanding the compressed work week program to its corporate offices in California.<sup>15</sup>

### **Educational Testing Service (Princeton, NJ)**

Educational Testing Services develops and processes standardized student tests (including the SAT). When developing its Commuter Choice program in 1995, ETS asked employees and supervisors which options might benefit both the organization and workers. As a result, compressed work weeks, flex-time, and telework were implemented as part of a more comprehensive ECO-Motion program. About 25% of ETS' almost 2,500 employees are on a compressed work week. The use of 4/40 and 3/36 schedules seems to suit employees in the data center and customer service, where more coverage during the day is a benefit to ETS. When asked, almost half of participating employees said that the time choice option has improved their personal productivity as a result of the longer day.<sup>16</sup>

## **TOP 11 TIPS—TIME CHOICE**

### **1. Use Flex-Time as an Incentive—**

Flex-time can be used as an incentive for employees to use an alternative mode, such as carpooling or transit. In other words, those who are using alternative modes are also allowed to work flexible hours.

### **2. Work to Maintain Alternative**

**Mode Use—**When implementing compressed work weeks, work with employees who currently carpool or use the bus to maintain those modes on the days they report to work by providing information and even incentives.

### **3. Think Through the Impact on**

**Operation—**When considering flex-time or compressed work weeks, think through the added hours of operation and the need to implement core hours. Management should not view these programs as disruptive, rather they should be able to observe happier, more productive employees.

**4. Ask Employees—**A quick survey of employees may help to determine the type of schedule flexibility that makes the most sense. Different employees will have different personal needs, such as child care or school, that will affect their work schedule.

### **5. Offer More Than One Option—**

Because some employees may not want to or be able to work longer days, flex-time or staggered shifts might be offered to some employees and compressed work weeks to others.

### **6. Consider Implementing by**

**Department—**Some functions within an organization (manufacturing, customer service, etc.) may not be conducive to schedule flexibility.

### **7. Check with Neighbors—**

When staggering hours or changing to a longer work day via compressed work weeks, make sure that the new schedule does not conflict with the schedules of neighboring employers. A lack of coordination could result in worse traffic jams, not better.

### **8. Include During New Employee**

**Orientation—**Explain the work schedule options to new employees, but encourage their consideration of mode options as well.

### **9. Adopt a Specific Policy on Work**

**Hours—**Because work hour programs affect the operation of the organization, very clear and specific policies and management support are needed to assist employees and supervisors to understand and make use of the options.

### **10. Re-evaluate the Program—**

After 6 months or a year, poll employees and supervisors to see if the program is working to everyone's satisfaction. Hours and policies may have to be amended to make the alternative schedules work best.

### **11. Comply with Federal and State**

**Guidelines—**Work with Human Resources to make sure that the alternative work program complies with federal and state labor laws.

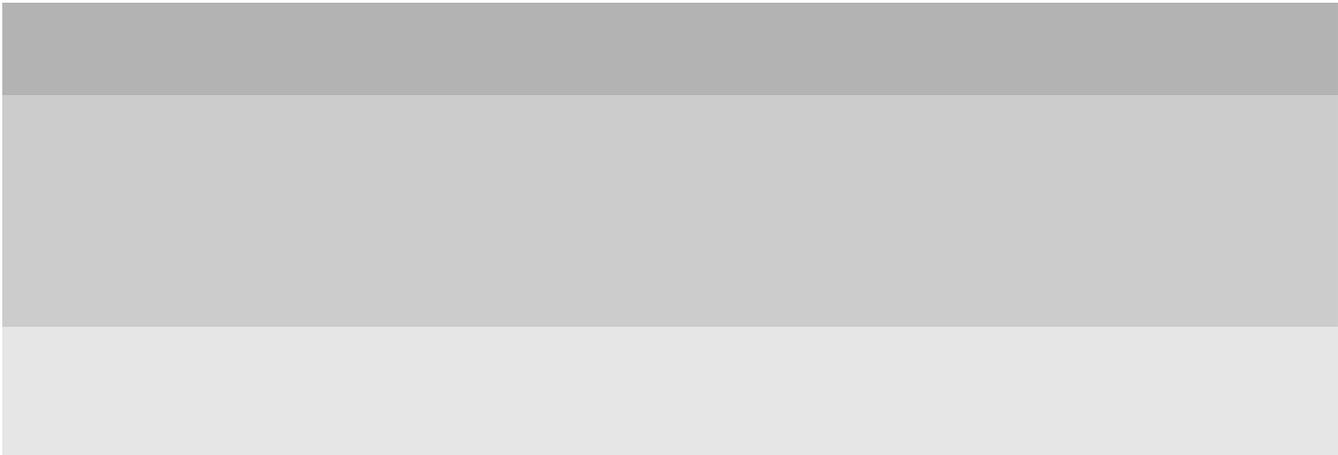
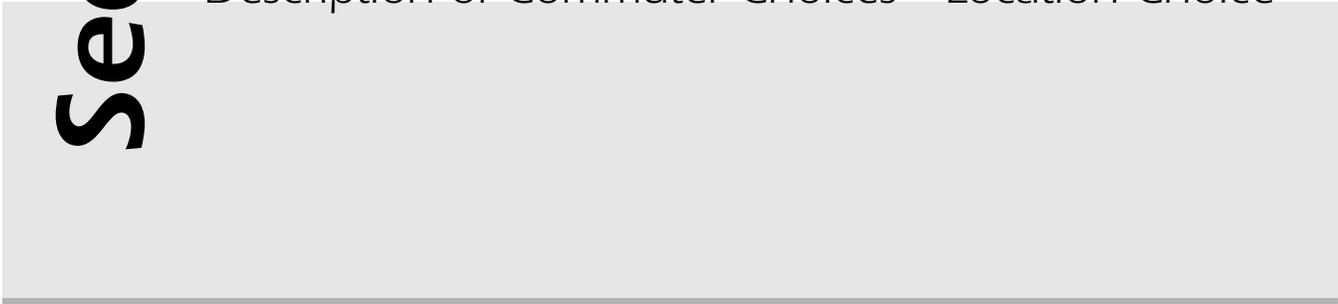
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# Section

Description of Commuter Choices—Location Choice



## Section 6

# Description of Commuter Choices—Location Choice

### DESCRIPTION

Telecommuting is a desirable commute option for many employees who can perform all or part of their job from home or a location closer to home. Obviously, this eliminates the car driven to work on the days when employees telecommute. However, there are other options that affect where employees live and work. Many workers try to avoid long, stressful commutes by changing where they work at least 1 or 2 days per week. Likewise, many employers are changing the worksite itself to alleviate the need for employees to use their car during the day. The location and design of an employee's residence and workplace can have a significant impact on the commute. These location choices affect **where** employees work and **whether** they even commute to the worksite.

### OPTIONS

Location choice options can be divided into two groups:

- 1. Home Options**—Including working from home (telework) or relocating your home closer to work.
- 2. Worksite Options**—Locating a worksite in an area with better mode choices and/or providing on-site amenities and services to encourage alternative mode use and reduce unnecessary trips during the day.

The specific options are:

#### Home Options

**Telework**—Working from home is a popular and often necessary arrangement for small businesses. Increasingly, larger organizations are allowing employees to work from home a few days per week or month. These arrangements have been made on an informal basis for a long time where an employee and supervisor agree to allow some work to be done from home. Employers are now adopting formal telework (also known as telecommuting) policies that spell out who can participate, the conditions for teleworking, and the nature of the rela-

tionship between the “teleworker” and “telemanager.” In some cases, the employer assists with equipping a home office (e.g., adding a high-speed Internet connection or enhancing home computer equipment). Teleworking benefits employees and the employer alike. Employees are often more productive on their telework days, and employers can save on office space and expenses.

A small portion of teleworkers work from a telecenter. This is an office shared by many employers that offers some services, such as copying, office space, etc. Many federal workers in the Washington, DC, area work in telecenters operated by the General Services Administration.

**Live Near Work**—Employers can encourage employees to live near the worksite by providing information to new employees on areas that have reduced commute times or are near transit lines. Some employers even provide rent subsidies for employees who re-locate closer to the work site. Under very competitive recruiting environments, some employers (such as universities) participate in the development of affordable housing close to the worksite.

Another option is called “proximate commuting.” This option allows employees to work at branch locations nearer their homes. For example, a major bank in Washington State allowed some employees to report on a part-time or full-time basis to branch offices rather than traveling to headquarters locations.

#### Worksite Options

##### **Worksite Location and Design**—

Employers can choose to locate offices or facilities close to transit stations or near services to reduce the employees' need for their cars. Many cities are encouraging “transit oriented development,” which takes advantage of nearby transit by providing connection to rail stations or providing convenient access to bus stops. Employers sometimes

choose to locate worksites in “mixed use developments” that allow office workers, for example, to have access to shops, restaurants, and services within walking distance. Employers also can design their worksites to be more conducive to alternative modes. For example, parking garages can be built to accommodate vanpools, safe secure bicycle storage can be provided, and well-lighted, maintained sidewalks may be provided to those walking from home or a transit stop.

**On-Site Services**—Many commuters cite the need for a car during the day to run errands as a reason for not trying a different travel mode. This situation can be partially alleviated by offering certain services on-site. Many organizations have on-site cafeterias or cafes that offer discounted prices to employees. This not only provides a convenience for workers but reduces loss of productivity from extended lunch periods as employees travel during noon-time traffic levels. Other on-site services can include postal services, health care, child care, dry cleaning, sundry stores, and fitness facilities. In Louisville, KY, the United Parcel Service brought community college classes on-site for employees working overnight shifts who could not attend classes during the day or in the evening. Some employers have implemented teleconferencing among multiple worksites to reduce travel needs and lost time.

## CONDITIONS AND BARRIERS

As stated earlier, most telework occurs informally as employees ask to work from home on occasion to finish a project or to alleviate the need to commute long distances everyday. When turning an informal program into a formal telework policy, significant planning and training is required. The appropriate job functions for telework must be determined. A corporate telework policy should be communicated to all employees. The greatest barrier to telework is not technology at home—it is the mistrust of supervisors or misunderstood rules or expectations on the part of employees. This can be addressed through company policies and training (see below).

In terms of other location choice options regarding the proximity to home and services, few employers will undertake these significant and often costly actions to reduce

the use of cars at the site. However, when decisions about location, amenities, and employee recruitment are being made, the impact on mode, route, and even time choice should be considered. Employees appreciate the ability to have choices on where they eat and shop and the option of staying at or near the worksite. The bottom-line benefit to the employer is not only happier employees but potential savings in reduced parking construction costs.

## EMPLOYER STRATEGIES AND SUPPORTING SERVICES

Employers can be supportive of location choices in several ways:

**Telework**—A telework program should be accompanied by extensive training and monitoring to ensure that teleworkers and telemanagers have thought through the nature of work to be performed from home and the means for correcting any deficiencies. Employers can also provide or partially subsidize any improvements needed to an employee’s home office. For example, AT&T in New Jersey recycles the last generation of personal computers to teleworkers.

**On-Site Services**—Worksite services and amenities need to be promoted to employees so that everyone is aware of on-site and nearby services. Some companies and nearby businesses provide employee discounts for patronizing restaurants, dry cleaners, convenience shops, etc.

## SYNERGIES WITH OTHER CHOICES

Just as with time choices, telework options need to be carefully planned to avoid the unintended shifting of employees back to driving alone. Employees should be encouraged to use mode options on days when they report to work. Telework programs are sometimes combined with compressed work week or flex-time programs to allow latitude on when and where employees work.

Likewise, the provision or promotion of worksite and nearby services can reduce the need for a car during the day and make using a mode choice option more viable.

## KNOWN EFFECTIVENESS AND COST EFFECTIVENESS

Although some estimates show that up to 50% of all jobs are suitable for telecommuting, the actual portion of employees who might actually telework is likely smaller. Many jobs require access to special equipment, and frequent face-to-face contact is often needed.<sup>17</sup> However, if employees telework 2 days per week, 40% of their car use is reduced, and the savings of miles traveled may be greater because teleworkers tend to have longer commutes.

A recent study estimated that 6.1% of California workers may telecommute an average of 1.2 days per week, meaning that about 1.5% of the workforce may be teleworking on any given day.<sup>18</sup> Numerous examples are cited below of employer programs that have reduced the number of cars coming to the worksite via telework. A survey of 400 teleworkers in the United States indicated net reductions in the miles traveled by these commuters of 30 miles per telework day.<sup>19</sup>

Research in the Los Angeles area looked at site design and employer program effectiveness. It concluded that the most effective employer programs combined financial incentives for using commute alternatives with aesthetically pleasing site features. In other words, employees are most willing to use commute alternatives when direct financial incentives (or disincentives) are offered and the site is well-landscaped, easily accessed, and visually pleasing. A weaker, but positive, link was established between sites with the provision of **on-site amenities** and in-house commuter assistance services.<sup>20</sup>

There are several tools to help estimate the potential cost and benefits for a specific worksite. EPA's website [www.commuterchoice.gov](http://www.commuterchoice.gov) provides a calculator that allows employer to estimate financial savings (e.g., taxes, parking facilities, employee turnover) and the estimated traffic and air pollution that can be eliminated by implementing Commuter Choice strategies.

## EXAMPLES—LOCATION CHOICE

Most of the documented examples of location choices concentrate on telework. Many companies have implemented on-site services and designed their sites to encourage choices, but few concrete results are available.

### The Guardian Life Insurance Company (Spokane, WA)

When Guardian Life Insurance's Western Regional Office ran out of space at its Spokane location, it implemented a telework program. Starting with a pilot program of 10 employees, management evaluated the program and expanded it to 50 full-time teleworkers out of 635 employees (with plans to increase to 76). The Claims Approvers and Customer Service Representatives are provided with a PC, software, combination printer/fax/copier, and chair. Guardian reports a 10–20% increase in productivity and cost savings from not having to add office space for 50 employees. It feels the program helps retain top performing employees, enhances employee job satisfaction, and increases the potential for overtime and higher productivity targets. One Vice President was quoted as saying, "Even if we received neither productivity or space savings, telework is part of creating a flexible, accommodating work environment for employees; the rest is gravy...very good gravy."<sup>21</sup>

### Holland America Line/West Tours (Seattle, WA)

Holland America chose to implement telework when compelled to comply with the state's Commute Trip Reduction law. Holland America has 1,000 employees at its headquarters site, and turnover among reservation agents had grown to 60% per year. Telework was chosen to address this retention issue. In addition to reducing turnover rates, the company found substantial productivity benefits. Teleworkers can handle more calls and bring in more revenue than their office counterparts. One Vice President said, "Three years of statistics show it takes nine teleworkers to do the work of 10 in-office reservation agents." The program has expanded as other departments join the program.<sup>22</sup>

### **Bellcore (Piscataway, NJ)**

This large telecommunications research firm with more than 5,000 employees implemented a comprehensive Commuter Choice program in 1994 that included mode, time, and location choices. When asked what would encourage employees to stop driving alone to work, the most popular responses were telework and work hour programs. The Bellcore telework program began with a carefully planned 90-day pilot program. These self-directed, idea-focused employees realized up to a 20% increase in productivity. This paved the way for 500 employees who now telework an average of 2 days per week and 500 more who occasionally work from home. Bellcore also implemented teleconferencing between its sites. It estimates that this reduces 30,000 trips made between sites each year for a savings in lost productivity of \$2–3 million.<sup>23</sup>

### **Key Bank (Seattle, WA)**

This Washington banking organization participated in a study for 14 of its branches in the Seattle area. The study revealed that 83% of employees lived closer to another branch office. Key Bank then implemented a program to trade employees who wanted to switch between sites, and the average commute for these employees was reduced from an average of 43 miles to just 15 miles. The study was part of a demonstration project for “proximate commuting.”<sup>24</sup>

### **California Public Employee’s Retirement System (Sacramento, CA)**

CalPERS is committed to helping reduce congestion and clean the air in Sacramento. This state agency’s Employee Alternative Commute Program encourages employees to use alternatives to driving alone, and currently one out of every three employees does use an alternative. In addition to a significant transit subsidy (75% of a monthly pass price) and a shuttle to a nearby light rail station, CalPERS has many on-site amenities, including a sundry store, locker and shower facilities, and secure bicycle parking.<sup>25</sup>

## **TOP NINE TIPS—LOCATION CHOICE**

### **1. Promote Telework and On-Site Amenities as Benefits**

—Employees appreciate the ability to work from home as well as having services on-site as a convenience.

### **2. Work to Maintain Alternative**

**Mode Use**—Telework and alternative work schedule programs should be integrated into a comprehensive Commuter Choice program that promotes mode and route choices as well.

### **3. Work Out Deals with Neighboring**

**Businesses**—In order to get employees to use restaurants and shops within walking distance, work out discounts or trial offers.

**4. Get Help**—Many regional agencies and consultants provide assistance with setting up a formal telework program. They can help you avoid unnecessary pitfalls along the way.

**5. Evaluate Job Categories**—Before announcing a telework program to employees, carefully think through which jobs are conducive to telework and will be beneficial to the employee and employer alike.

### **6. Take Advantage of Branch**

**Offices**—Could some employees report to a satellite office closer to home some of the time? This will reduce the time and stress for that employee's commute.

### **7. Include During New Employee**

**Orientation**—Explain any telework policy to new employees, including the departments that can participate and how to discuss the program with employees' supervisors. Employees should still be encouraged to consider mode options as well. New employees can also be informed of residential locations with good transit access or shorter commute times.

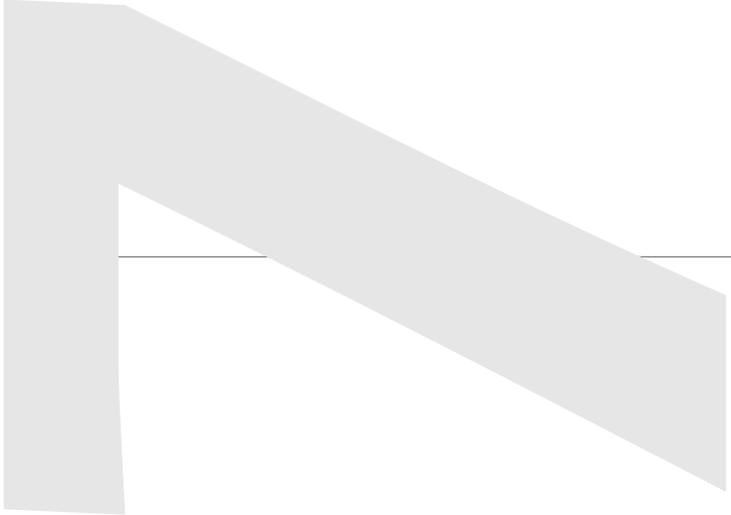
### **8. Adopt a Specific Policy on**

**Telework**—Because telework programs require a new and special work arrangement, very clear and specific policies and management support are needed to assist employees and supervisors to understand and make use of the options.

### **9. Re-evaluate the Program**

—After 6 months or a year, poll employees and supervisors to see if the program is working to everyone's satisfaction. Telework policies may have to be amended to make the alternative schedules work best.

To determine if any of these Location Choice strategies would work for your worksite, go to the CCDSS and complete the Interactive Guidance Tool.



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# Section

Description of Commuter Choices—Route Choices

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## Section 7

### Description of Commuter Choices—Route Choices

#### DESCRIPTION

Commuters are creatures of habit. They usually travel to work at the same time, with the same mode, to the same place, and via the same route. However, as delays increase on our highways, commuters often wonder if there are other routes to take to avoid the congestion. This congestion can be caused by traffic accidents, bad weather, road construction, or even just increasing traffic that causes more delays and longer commutes. Some travelers will experiment with other routes or find out about a “secret” way to work by word of mouth. In a well-publicized story from Boston, commuters who found these secret routes around a major highway reconstruction project would not tell reporters for fear that everyone else would start using the route and eliminate any time savings.

However, advances in information technology make up-to-date advice available to commuters on alternative routes. This information on accidents, weather, recurring congestion, or other delays can be delivered to the commuter at home (TV traffic reports), in the car (radio traffic reports or in-vehicle navigation systems), at the workplace (on the PC or fax), or even via pagers, cell phones, or palm tops. This same technology, and the ability to constantly monitor highways, also makes available “real-time” traffic information on where, when, and how severe traffic jams occur. Most of the information is provided directly from the information source to the commuter. However, employers can play a role in facilitating the exchange of information and make employees aware of alternative routes. Route choice strategies give employees options on **which way** to travel to work.

#### OPTIONS

##### **Real-Time Commuter Services—**

Employers can facilitate the provision of real-time commute information to employees in one of several ways:

- **Provide Traffic Alerts to Employees—**Employers can provide e-mail alerts of major accidents or weather-related delays, including suggestions of alternative routes (see University of Pittsburgh example). This information can come from transportation agencies (such as a Traffic Management Center) or from traffic information providers (such as providers to TV and radio stations).
- **Support Information Kiosks—**Employees can also get information from kiosks located in building lobbies or transportation centers. Although few employers offer kiosks, several large multi-tenant buildings and government buildings provide traffic information kiosks that show current traffic jams and can provide users with interactive information on alternative mode, routes, and related services.
- **Inform Employees of Services—**Employers can also educate employees on the availability of the growing number of real-time traffic information providers. Many services provide alerts and alternative routes for those who register commute information with the service (see TrafficBee.com example). In San Diego, a real-time traffic information service is linked to the public radio website, and employees throughout the region are encouraged to visit the website before leaving work.
- **Advanced Route Planning—**Employers can provide personalized route planning to new employees, those seeking alternative routes, or all employees when relocating to a new site. This latter practice is quite common. In order to retain valued workers, some employers provide extensive mode and route planning services to employees who must find new ways to get to work. Ongoing route planning services can become part of an employer’s comprehensive Commuter Choice program. Computerized route planning tools make this function relatively easy (e.g., software or on-line services such as Mapquest).

## CONDITIONS AND BARRIERS

Route planning and information services seldom cause changes in mode (although they can during long-term reconstruction projects), but they can affect employees' time choice and make the commute less stressful for all employees, including drive alone commuters. Because Commuter Choice is aimed at improving the "quality of the commute," route choice can benefit all employees to some degree. Perhaps the greatest barrier is simply getting employees to access and use the information provided and act upon it by changing the route, time, or mode with which they commute.

## EMPLOYER STRATEGIES AND SUPPORTING SERVICES

Employers should integrate route and traffic information into their overall Commuter Choice program, at a minimum, to make employees aware of information providers in the region. Specifically, employers can provide e-mail updates to employees when major accidents or weather affect a primary commute route. Employers can also place (or allow public agencies to place) information kiosks in building lobbies. Some of the traffic and route information sources may be available for a fee. For example, in the New York, New Jersey, and Connecticut area, the Personalized Traveler Service is provided to individual commuters for a fee via cell phone, pager, e-mail, or fax. Employers could subsidize these services or arrange information for all employees through private providers.

## SYNERGIES WITH OTHER CHOICES

Route choice can benefit employees who want to drive alone and alternative mode users equally. It can also benefit those using location choices on the days they report to work. Real-time traffic information can clearly benefit those using time choices to opt for different times or routes to avoid traffic jams, accidents, or routes that worsen in bad weather.

## KNOWN EFFECTIVENESS AND COST EFFECTIVENESS

Far less research has been conducted on employee responses to travel information than the other choices included in this document. However, information from a few regional "advanced traveler information systems" can be reported:<sup>26</sup>

- A survey of 2,000 users of Boston's "SmarTraveler" information services revealed that 14% had changed their departure time and 12% reported changing their route as a result of the information.
- In a survey of commuters in Seattle, where a "Smart Trek" traveler information system has been implemented, 29–36% of respondents reported that traffic messages frequently influenced their commute choices.
- Finally, a survey conducted by the DOT inquired about the conditions under which travelers would consider changing routes. Some 20% of respondents said they would change their route of travel if they received information that a delay of 15 minutes or more was expected.

There are several tools to help estimate the potential cost and benefits for a specific worksite. EPA's website [www.commuterchoice.gov](http://www.commuterchoice.gov) provides a calculator that allows employers to estimate financial savings (e.g., taxes, parking facilities, employee turnover) and the estimated traffic and air pollution that can be eliminated by implementing Commuter Choice strategies.

## EXAMPLES—ROUTE CHOICE

Examples of employer-provided route information are not widely available. More common are examples of route and traffic information sources that are available to commuters and can be promoted by employers.

## EMPLOYER EXAMPLES

### University of Pittsburgh Ride Share Program (Pittsburgh, PA)

The University of Pittsburgh, located in a built-up area, can only accommodate about half of its employees and students with parking spaces. An extensive Commuter Choice program is in place to offer options to those traveling to the campus area. One key element of the University of Pittsburgh's program is an e-mail alert service that goes to more than 300 registered recipients. Alerts are provided for ongoing construction delay and for accidents or weather problems as they occur. Pittsburgh commuters travel on a number of bridges and tunnels, and real-time information on closures or major tie-ups can allow Pittsburgh employees and students to seek other routes.<sup>27</sup>

### Northrop Corporation (Pico Rivera, CA)

In the 1980s, the Northrop Corporation expanded its operations and relocated employees from several facilities in the southern California area to a new facility in another part of the region. Management was concerned about employee retention as well as recruiting highly qualified employees in the very competitive market area. One of the solutions was to provide a comprehensive commuter transportation program as a company benefit. The program offered subsidized commuter bus service, vanpools, and carpools. Prior to the move, all employees were given a personalized "ridematch" list providing all of the options for traveling to the new worksite. Ridematch lists were based on where an employee lived and offered information about potential carpool and vanpool partners as well as transit route information. Northrop's commuter program was highly successful at retaining and recruiting new employees, and on any given day, it was estimated to reduce parking demand by more than 500 spaces a day.<sup>28</sup>

## INFORMATION AVAILABLE TO

## COMMUTERS

### SmarTraveler (Washington, DC, Region)

A consortium of public and private organizations in Washington, DC, called Partners in Motion, joined forces in 1997 to launch a regional traveler information system. Today, the SmarTraveler service is available to commuters to learn about "real-time, route-specific" highway, transit, and rail service conditions. Travelers can access this information by telephone, cell phone, or Internet. Users enter a route code that corresponds to major travel corridors in the region. This information is also available on kiosks located at transportation centers and federal office buildings.<sup>29</sup>

### Microsoft My Car (Seattle, WA)

A new service for MSN subscribers provides current traffic information to either a user's personal computer or cell phone. My Car gathers information from various sources, including the Washington State Department of Transportation, and supplies it in a format that can be displayed on a variety of devices. Traffic alerts are delivered to the user when requested. My Car can be tailored to report on traffic in certain areas and at certain times of day.<sup>30</sup>

### TrafficBee (Los Angeles, CA)

A partnership of Southern California Rideshare and CeloView LLC created TrafficBee.com, an individually customized interactive traffic and transportation information source on the Internet. This free service requires users to register and provide basic information on their commute route, times, and mode. TrafficBee then provides alerts via e-mail when problems occur on that route so that commuters can make changes to get to their destination. TrafficBee also offers services to employers to alert vanpool drivers, provide information to new hires, and provide information to employees without Internet access.<sup>31</sup>

## TOP FIVE TIPS—ROUTE CHOICE

### 1. Learn Sources of Information—

In order to inform employees, you should research public and private sources of traffic information and route planning.

**2. Provide Route Information to New Hires**—In addition to providing mode, time, and location choices at new employee orientation, provide new hires with route planning assistance.

**3. Provide Link to Traffic Website**—Provide a link on any employee websites to regional traffic information sources. Many of these services include real-time information on accidents and delays.

**4. Include Route Planning in Any Employee Relocation**—When planning any relocation of employees or an entire worksite, include route (and mode) planning services for employees to ease in the transition to a new site.

**5. Publicize Information**—Let employees know about information sources available by publicizing it in employee newsletters, bulletin boards, e-mails, etc.

To determine if any of these Route Choice strategies would work for your worksite, go to the CCDSS and complete the Interactive Guidance Tool.



# 8

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## **Section**

Summary of Choices—What Works?

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## Section 8

### Summary of Choices—What Works?

#### WHAT WORKS BEST?

The range of Commuter Choices was described in detail in Sections 4–7. But do we know what works best? In this section, we try to answer three basic questions:

1. What are the most effective Commuter Choice options?
2. What other strategies are effective?
3. What can supporting organizations do to help?

To answer these questions, we look at some of the research that has been conducted on employer Commuter Choice programs.

#### QUESTION 1—WHAT ARE THE MOST EFFECTIVE COMMUTER CHOICE OPTIONS?

Research into alternative commuting options consistently points to financial incentives and disincentives as one, if not the most, useful and cost-effective employer Commuter Choice options. Financial incentives include mode-specific subsidies (such as transit pass subsidies and vanpool fare subsidies), parking cash-out, subsidized parking fees and tolls for alternative modes, and general subsidies for all commute alternatives. Financial disincentives include parking charges and any fees targeted to drive alone commuters (tolls, etc.). Financial incentives and disincentives are often used to influence non-work trips as well, including parking pricing for large events and discounted transit tickets for visitors or shoppers.

One study of 58 pilot projects in southern California concluded that:

Financial incentives/disincentives are the most consistently effective and cost effective group of projects.<sup>32</sup>

Commuters are very smart consumers. When faced with an economic choice (as opposed to lifestyle or environmental concerns), some commuters will switch modes to save on the cost of driving and to receive a “benefit” in the form of a subsidy. Nominal financial subsidies (on the order of \$1–2 per day) can cause commuters to shift

modes or location. Financial disincentives for driving should be accompanied by incentives for using alternatives so that drivers have something less costly to switch to. A popular misconception about Transportation Demand Management (TDM) is that it takes many years to persuade commuters to learn about, think about, and ultimately change modes. However, financial incentives and disincentives create almost overnight changes in behavior as commuters make rational economic decisions.

#### QUESTION 2—WHAT OTHER TDM STRATEGIES ARE EFFECTIVE?

A recent study conducted by researchers at the Washington State Department of Transportation summarized the research on which measures are effective in reducing drive alone commuting. Summarizing several earlier studies, they concluded:

These analyses suggest that telecommuting, compressed work weeks, financial incentives, financial disincentives, programs and incentives for biking and walking, and guaranteed ride home programs are likely to be related to change in driving alone commuting.<sup>33</sup>

After analyzing employer strategies and other variables, the researchers concluded that charging for parking, allowing telecommuting and flexible work hours, providing a guaranteed ride home, maintaining access to transit, and adding subsidies for walking showed a significant association with greater reductions in the drive alone rate.

Based on this conclusion, one might conclude that the following strategies are also effective at switching drivers to alternative modes but to a lesser degree than financial incentives and disincentives:

- Employer-supported telecommuting program
- Compressed work weeks
- Flex-time (especially for non-HOV commuters)
- Bicycle and walking programs
- Guaranteed ride home (GRH) programs

This suggests that so-called Time and Location Choices, non-motorized commute modes, and GRH programs should be supported and encouraged in addition to financial incentives for alternative modes and disincentives to driving alone.

One national research study that compares the offering of various types of employer-provided Commuter Choice strategies was conducted for the Transit Cooperative Research Board.<sup>34</sup> Data from almost 50 employers throughout the United States compared the percent reduction in cars for various types of commute alternative program types. The average “trip reduction” among these widely perceived successful case studies was 15.3% (at an average cost of about \$0.75 per one-way trip reduced).

#### The study results are as follows:

- Programs that only provided **information** on commute alternatives realized a **1.4% increase** in trips (meaning they were unable to stem the general national trend of increasing drive alone rates).
- Employer TDM programs that emphasized the **provision of the alternatives** themselves (such as vanpools) realized an average trip reduction of **8.5%**.
- TDM programs that focused on **financial incentives and disincentives** (such as transit subsidies and parking pricing) realized an average **16.4%** trip reduction.
- Employers that **combined both** enhanced alternatives (e.g., vanpool provision) with incentives or disincentives (e.g., vanpool subsidies) realized an average trip reduction of **24.5%**.

These results suggest that information alone is ineffective at changing commuters’ travel behavior. However, when commuters are made aware (perhaps most effectively through their employer) of enhanced alternatives and incentives for using them, some commuters will switch from driving alone. It also suggests that financial incentives alone are not as effective as when they are combined with the necessary alternative to driving alone and a means for employees to learn about the alternatives and incentives to use them.

The following overall conclusion is offered here:

It’s **what** you do to influence commute behavior (strategies/incentives) more than how you market the program or **how** much you spend.<sup>35</sup>

### QUESTION 3—WHAT ABOUT PUBLIC SUPPORT PROGRAMS?

Now that the more effective Commuter Choice strategies have been discussed, what about the support programs that are being implemented or supported by public agencies?

Ride matching is one clear example of such a support program. The regional ride matching database frees employers from having to implement their own process and provides access to a larger pool of applicants to match. Because a significant proportion of the shift from driving alone is to carpooling,<sup>36</sup> the matching services are vital. Research in Los Angeles showed that about half of carpoolers rideshare with co-workers and another half rideshare with family, friends, or neighbors.<sup>37</sup> Research in Washington, DC, revealed that almost half (48%) of drive alone commuters said one reason for not carpooling or vanpooling was not knowing anyone to ride with.

Carpool matching is clearly more attractive when potential users are offered a financial incentive. In California’s Riverside and San Bernardino Counties, an alternative mode subsidy is offered to drive alone commuters who commit to rideshare at least 1 day per week. A \$2 a day subsidy is provided via a partnership between the public sector and employers for up to 3 months. The intent is to get drive alone commuters to try an alternative mode. A majority of commuters (almost 90%) continue to share a ride after the subsidy expires, and more than half are still ridesharing 1 year later.<sup>38</sup>

To assist you in determining what Commuter Choice strategies would work best for your worksite, go to the CCDSS and complete the Interactive Guidance Tool.





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# Section

Steps for Selecting and Implementing Choices

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## Section 9

# Steps for Selecting and Implementing Choices

Simply knowing about all of the commuter options does not make it easy to determine which ones may work best for a particular worksite. Commuter Choice programs are not “one size fits all.” Strategies should be selected based on the type of business, worksite location, employee commuting needs and attitudes, availability of commute options, and management support. Not all options work for all worksites and employees. The following provides some guidance on how to select the most appropriate strategies.

### WHAT ARE THE BEST STRATEGIES FOR A SPECIFIC WORKSITE?

In order to develop a program that best suits specific employer needs, it is important to first collect information and identify certain characteristics of the worksite and its employees. For example, is the site served by transit and/or other alternative transportation services, can employees shift their work schedules to accommodate a bus/train or vanpool schedule, do employees live near one another so they can form rideshare arrangements, is there limited employee parking, does the employer provide free parking, and how far do employees commute to work? The responses to these and other questions lead to the type of strategies that will entice employees to choose a commute option alternative.

The Interactive Guidance Tool of the CCDSS provides a list of questions regarding worksite and employee characteristics that will assist in determining the most appropriate strategies for a particular employer. Based on responses to these questions, the CCDSS will provide a set of recommended strategies. These recommendations represent potential strategies that may be effective based on the information provided. If answers are incomplete, additional worksite research may be needed. Some employers conduct an employee survey to determine their needs and attitudes about commuting. Others hold focus groups with

employees and key members of management to collect information that will help in determining the most effective and appealing strategies. A sample employee survey is provided at the end of this section and on the compact disc.

### STEPS TO IMPLEMENTING A COMMUTER CHOICE PROGRAM

After the CCDSS process has been completed and recommendations identified, the next step is to begin implementing the identified strategies. Following are a few tips on how to get started:

**Form a Task Force**—Identify the departments and employees that will need to provide input or assistance to the Commuter Choice program. These usually include representatives from Human Resources, Facilities, Finance, Tax Department, Transportation, and any unions or groups that may be represented at the site. Union representatives especially should be involved if you are considering changing work schedules or any employee policy such as parking benefits. Form a Commuter Choice Task Force to assist in developing the program.

**Assign a Lead Person**—Just like any employer-sponsored program, you will need a person to be responsible for coordinating the activities. This person will need to be responsible for the daily and overall operations of the program. Keep in mind that the person who develops the program is not always the right person to manage the daily activities.

**Gain Management Support**—No program will be successful if you do not have support from all levels of management, especially upper management. Be prepared to show management the benefits of a Commuter Choice program. This support will be needed when you ask for resources to implement the program.

**Canvas or Survey Employees**—In order to gain more knowledge about what specific strategies will be most appealing to your employees, conduct a survey or focus group to determine their commuting habits and needs.

**Determine Specific Strategies to Implement**—Starting with the recommendations from the CCDSS and based on input from employees and the Task Force, determine specific strategies to implement. It is sometimes best to start a new program with a few high-potential strategies instead of trying to implement all possible options. You can always enhance the program after it is started.

**Establish a Budget**—Work with the Task Force to determine the appropriate budget needed to implement the selected strategies. Remember, the most effective strategies are not always the most costly. Sometimes it is the way a strategy is implemented, rather than how much money is used, that makes it more effective. However, a Commuter Choice program will cost the employer something, even if it is just staff time. The greater the need, the greater the level of resources that may be needed.

**Market and Promote**—Once the program is developed and ready to start, you will need to inform employees. Use employer newsletters, bulletin boards, e-mail, and other internal communications methods to raise awareness about the program. Let employees know what their commuting options are, what assistance is available, and how they benefit from participating. Offer give-aways for new participants and rewards for those who continue to participate. Promotion of the program is an ongoing effort. Try new activities and messages so that employees do not forget about their options.

**Track Success**—The time will come when management will ask about the program's effectiveness. Be prepared by monitoring program activities. Prepare status reports with information such as the number of participants, number of vehicle miles reduced by the participants, and cost of the program. Change or refine the program if it is not as effective as you need it to be.

**Make Use of External Resources**—Get help from others who have implemented Commuter Choice programs. There may be organizations in your area that provide commuter services for employers. Contact these organizations and other employers that have started a similar program to get support in developing your own program. Refer to Section 10 to see what resources may be available in your area, such as a regional rideshare or public transportation agency, a TMA, or other employer network group that you could join.

The information in these guidance materials provides an overview of typical Commuter Choice strategies and examples of their effectiveness. It should be noted that the effectiveness of Commuter Choice activities in addressing specific worksite needs depends on several factors, including the level of effort and resources that are allocated to the program. Employers may need to change or enhance a program periodically to determine the most effective strategies for their needs. Refer back to the CCDSS and this document periodically to get new ideas and locate additional resources.

BASELINE SURVEY																																	
<b>1 How far from work do you live? (one way mileage)</b>																																	
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<b>2 What is your home zip code?</b>	<b>3 Do you work?</b>																																
<table border="1"> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>						Full time ( ) Part time ( ) Compressed work week ( )																											
<b>4 How did you travel to work each day?</b>																																	
Pick the number that matches the commute mode, or reason for not commuting for each day of the week. Enter those numbers in the boxes below. If you used more than one mode of transportation for the trip to work, choose the number which accounts for the largest segment of your trip.																																	
<table border="0"> <tr> <td>MON</td> <td><input type="checkbox"/></td> <td><b>Commute Mod</b></td> <td><b>Reasons for not Commuting to worksite</b></td> </tr> <tr> <td>TUE</td> <td><input type="checkbox"/></td> <td>1 Drive alone to worksite</td> <td>8 Telecommuted</td> </tr> <tr> <td>WED</td> <td><input type="checkbox"/></td> <td>2 Motorcycle/moped</td> <td>9 Reported to another worksite</td> </tr> <tr> <td>THU</td> <td><input type="checkbox"/></td> <td>3 Carpool (# in pool ___)</td> <td>10 Traveled on business</td> </tr> <tr> <td>FRI</td> <td><input type="checkbox"/></td> <td>4 Vanpool (# in pool ___)</td> <td>11 Regular day off</td> </tr> <tr> <td></td> <td></td> <td>5 Public transit</td> <td>12 Compressed work week day off</td> </tr> <tr> <td></td> <td></td> <td>6 Walk</td> <td>13 Other day off (vacation, sick)</td> </tr> <tr> <td></td> <td></td> <td>7 Bicycle</td> <td></td> </tr> </table>	MON	<input type="checkbox"/>	<b>Commute Mod</b>	<b>Reasons for not Commuting to worksite</b>	TUE	<input type="checkbox"/>	1 Drive alone to worksite	8 Telecommuted	WED	<input type="checkbox"/>	2 Motorcycle/moped	9 Reported to another worksite	THU	<input type="checkbox"/>	3 Carpool (# in pool ___)	10 Traveled on business	FRI	<input type="checkbox"/>	4 Vanpool (# in pool ___)	11 Regular day off			5 Public transit	12 Compressed work week day off			6 Walk	13 Other day off (vacation, sick)			7 Bicycle		
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		6 Walk	13 Other day off (vacation, sick)																														
		7 Bicycle																															
<b>5 A. If you normally use an alternative mode, what motivated you? (✓ one-three)</b>																																	
<input type="checkbox"/> Cost savings	<input type="checkbox"/> Save wear & tear on personal vehicle																																
<input type="checkbox"/> Stress reduction	<input type="checkbox"/> Cash incentive program																																
<input type="checkbox"/> Guaranteed ride home program	<input type="checkbox"/> Preferential car/vanpool parking space																																
<input type="checkbox"/> Time savings	<input type="checkbox"/> Flextime program																																
<input type="checkbox"/> Convenience	<input type="checkbox"/> Showers & clothing lockers																																
<input type="checkbox"/> To help improve our air quality	<input type="checkbox"/> Other _____																																
<b>5 B. Before you used an alternative mode, how did you get to work?</b> _____																																	
(Pick the number from question 4 that matches your previous commute mode and enter in the space provided.)																																	
<b>▶ Please Answer #6, #7 &amp; #8 if you DRIVE ALONE to work.</b>																																	
<b>6 What is your main reason for driving alone to work? (✓ one)</b>																																	
<input type="checkbox"/> Need my car at work for company business	<input type="checkbox"/> Cannot get home in an emergency																																
<input type="checkbox"/> Need my car at work for personal business	<input type="checkbox"/> Live close to work																																
<input type="checkbox"/> Parking is free or inexpensive	<input type="checkbox"/> Don't have anyone to ride with																																
<input type="checkbox"/> Need to run errands before or after work	<input type="checkbox"/> Don't like to depend on others																																
<input type="checkbox"/> Prefer to drive my own car	<input type="checkbox"/> Irregular work schedule																																
<input type="checkbox"/> Need to transport children	<input type="checkbox"/> Anything else takes too much time																																
<input type="checkbox"/> No reasonable transit option	<input type="checkbox"/> Poor bicycle and pedestrian access																																
<input type="checkbox"/> Transit costs too much	<input type="checkbox"/> Other _____																																
<input type="checkbox"/> Safety concerns																																	
<b>7 What would encourage you to use an alternative to driving alone?</b>	<b>8 If you normally drive alone, would you consider commuting using an alternative mode on an occasional basis?</b>																																
<input type="checkbox"/> Help finding carpool/vanpool match	<input type="checkbox"/> Yes <input type="checkbox"/> No																																
<input type="checkbox"/> Change in work shift/Flexible work schedule	If yes, what modes?																																
<input type="checkbox"/> Monthly cash subsidy for ridesharing	<input type="checkbox"/> Carpool driver																																
<input type="checkbox"/> Guaranteed ride home program	<input type="checkbox"/> Walk																																
<input type="checkbox"/> Secure, convenient bicycle parking	<input type="checkbox"/> Carpool rider																																
<input type="checkbox"/> Prizes, drawings, time off	<input type="checkbox"/> Vanpool driver/ rider																																
<input type="checkbox"/> Other _____	<input type="checkbox"/> Bicycle																																
	<input type="checkbox"/> Other _____																																
	<input type="checkbox"/> Public transit																																

Survey taken from the Association for Commuter Transportation (ACT) "TDM Toolkit," prepared by The Hoyt Company.

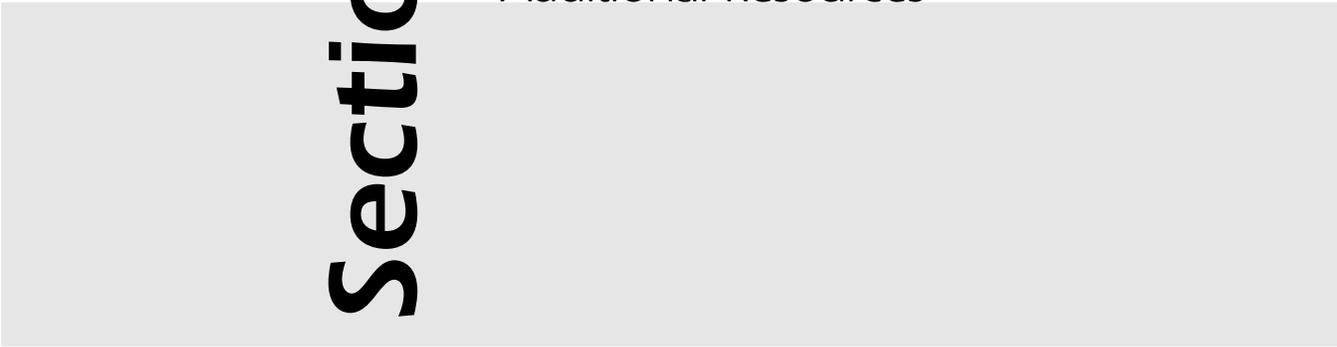
10

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1

**Section**

Additional Resources



## Section 10

### Additional Resources

Three types of additional resources are available to assist with the planning, implementation, and evaluation of a Commuter Choice program. They include other tools (such as the CCDSS), other guidance materials, and organizations that support employer Commuter Choice. Each type of resource is described below.

#### **OTHER ASSESSMENT TOOLS**

Several software packages exist that can assist with planning a Commuter Choice program, evaluate the impact of various options, calculate costs and benefits, and measure the results of the program.

#### **Plan a Commuter Choice Program—**

The CCDSS was modeled after a similar tool developed by a Belgian-led consortium for the European Commission. The “Toolbox for Mobility Management in Companies” is available in English at:

<http://www.mobilitymanagement.be>

**Evaluate the Impacts of Various Options—**To evaluate the potential for various Commuter Choice options (e.g., transit subsidy versus compressed work weeks) in terms of changing employee travel behavior, EPA has developed a software package called COMMUTER. It may be downloaded from the Transportation and Air Quality Center at:

<http://www.epa.gov/otaq/transp/traqmodl.htm>

**Calculate Costs and Benefits—**EPA has developed a website that provides calculators for employers to estimate financial savings (e.g., taxes, parking facilities, employee turnover) and the estimated traffic and air pollution that can be eliminated by implementing Commuter Choice strategies:

[www.commuterchoice.gov](http://www.commuterchoice.gov)

A Commuter Choice Calculator has been developed for EPA to assist employers in estimating the costs, savings, and other benefits from Commuter Choice programs. It is available from:

<http://www.epa.gov/otaq/transp/comchoice/ccweb.htm>

#### **Measure the Results of the Program—**

To measure the actual impact the Commuter Choice program has had on reducing commute travel and reducing automobile emissions, the California Air Resources Board has developed a Microsoft Access program to calculate the cost effectiveness of employer TDM programs. The software (TDMMethod 12-00.mbd) may be downloaded from:

<http://www.arb.ca.gov/planning/tsaq/eval/eval.htm>

#### **OTHER GUIDANCE DOCUMENTS**

Several other guidance documents and training materials are available for developing a worksite Commuter Choice program.

**TDM Toolkit—**A simple, comprehensive “how to” guide for employer Commuter Choice programs (including mode, time, and location choices) is available from the Association for Commuter Transportation. For information on obtaining this guidance manual, contact:

The Association for Commuter Transportation  
P.O. Box 15542  
Washington, DC 20003-0542  
202.393.3497  
E-mail: [act@act-hq.com](mailto:act@act-hq.com)  
[www.actweb.org](http://www.actweb.org)

Federal Transit Administration has developed a toolkit that includes information on the Commuter Choice tax benefits and how to consider and implement them at a worksite. The toolkit documents may be downloaded in PDF or HTML format from:

<http://fta.dot.gov/library/policy/cc/cc.html>

### **National Standard of Excellence for Employer-Provided Commuter**

**Benefits**—EPA offers a list of employers across the country that have committed to meeting certain standards by implementing Commuter Choice programs. Materials for becoming a Commuter Choice employer are provided at the following website:

[www.CommuterChoice.gov](http://www.CommuterChoice.gov)

**Commuter Choice Training**—The American Management Association developed, on behalf of EPA, a training course on Commuter Choice. For information on the course, visit:

<http://www.epa.gov/otaq/transp/amatrains.pdf>

**TDM Encyclopedia**—The Victoria Transport Policy Institute maintains a very comprehensive website for Commuter Choice and other Transportation Demand Management measures at:

<http://www.vtppi.org/tdm>

## **ORGANIZATIONS AND WEBSITES**

Finally, there are a number of organizations that provide general information on Commuter Choice and many of the choices and options outlined in this report. The primary location for information on Commuter Choice is:

<http://www.commuterchoice.com>

This website is funded by DOT and EPA and is managed by the Association for Commuter Transportation. It includes general information on Commuter Choice and can suggest resources within a particular region.

Other organizations and their websites include the following:

Association for Commuter Transportation,

[www.actweb.org](http://www.actweb.org)

EPA's Commuter Choice site,

[www.CommuterChoice.gov](http://www.CommuterChoice.gov)

EPA's Transportation and Air Quality Center,

[www.epa.gov/otaq/transp](http://www.epa.gov/otaq/transp)

International Telework Association and Council,

[www.telecommute.org](http://www.telecommute.org)

National TDM and Telework Clearinghouse,

[www.nctr.usf.edu/clearinghouse](http://www.nctr.usf.edu/clearinghouse)

# Notes

- <sup>1</sup> The National Standard of Excellence for Employer-Provided Commuter Benefits—Promotional Material, U.S. Environmental Protection Agency.
- <sup>2</sup> LDA Consulting, “Union County Commute Choices: Employer Benefit Research,” prepared for Union County, NJ, December 8, 1998.
- <sup>3</sup> FHWA 1993 or TCRP or ACT UK.
- <sup>4</sup> TDM Review or FHWA or ACT UK.
- <sup>5</sup> U.S. Environmental Protection Agency (EPA), “Commuter Choice Employer Profiles,” prepared as part of the Commuter Choice Leadership Initiative, September 2001.
- <sup>6</sup> LDA Consulting, “Union County Commute Choices: Employer Benefit Research,” prepared for Union County, NJ, December 8, 1998.
- <sup>7</sup> EPA, “Commuter Choice Employer Profiles,” prepared as part of the Commuter Choice Leadership Initiative, September 2001.
- <sup>8</sup> S.T.E.R.N, “Guide for Company Mobility Counseling,” Berlin, 1998.
- <sup>9</sup> LDA Consulting, “Union County Commute Choices: Employer Benefit Research,” prepared for Union County, NJ, December 8, 1998.
- <sup>10</sup> Washington State Department of Transportation, “1999 CTR Task Force Report to the Washington State Legislature,” Washington State Commute Trip Reduction Program, December 1999.
- <sup>11</sup> Alyssa Freas and Stuart Anderson, “Effects of Variable Work Hour Programs on Ridesharing and Organizational Effectiveness: A Case Study in Ventura County,” *Transportation Research Record #1321*, pp. 51–56, 1992.
- <sup>12</sup> WSU Cooperative Extension Energy Program, “Commuter Challenge Case Studies” found at [www.commuterchallenge.org](http://www.commuterchallenge.org).
- <sup>13</sup> Ibid.
- <sup>14</sup> EPA, “Commuter Choice Employer Profiles,” prepared as part of the Commuter Choice Leadership Initiative, September 2001.
- <sup>15</sup> WSU Cooperative Extension Energy Program, “Commuter Challenge Case Studies” found at [www.commuterchallenge.org](http://www.commuterchallenge.org).
- <sup>16</sup> LDA Consulting, “Union County Commute Choices: Employer Benefit Research,” prepared for Union County, NJ, December 8, 1998.
- <sup>17</sup> Victoria Transport Policy Institute, *On-Line TDM Encyclopedia, Telework: Using Telecommunications to Substitute for Physical Travel*, updated November 2001.
- <sup>18</sup> Patricia Mokhtarian, “A Synthetic Approach to Estimating the Impacts of Telecommuting on Travel, in *Urban Studies*, 2000.
- <sup>19</sup> Jack Nilles, “What Does Telework Really Do to Us,?” *World Transport Policy and Practice*, Vol. 2, No.1/2, 1996.
- <sup>20</sup> Cambridge Systematics, Inc., *The Effects of Land Use and TDM Strategies on Commuting Behavior*, prepared for FHWA, Contract No. DTFH61-91-C-00085, July 1994.
- <sup>21</sup> WSU Cooperative Extension Energy Program, “Commuter Challenge Case Studies” found at [www.commuterchallenge.org](http://www.commuterchallenge.org).

- 22 LDA Consulting, "Union County Commute Choices: Employer Benefit Research," prepared for Union County, NJ, December 8, 1998.
- 23 Ibid.
- 24 American Management Association, "How to Implement an Effective Commuter Choice Program," prepared for EPA, May 2001.
- 25 EPA, "Commuter Choice Employer Profiles," prepared as part of the Commuter Choice Leadership Initiative, September 2001.
- 26 OECD, "Influencing Road Travel Demand Chapter 4—Traveler Information," Working Report, Paris, 2001.
- 27 Kathleen Miller, University of Pittsburgh, Pitt Ridesharing Program Administrator, Interview, October 24, 2001.
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- 29 Partners in Motion, *Getting You There Just Got Smarter*—brochure, 2000.
- 30 Brier Dudley, "Microsoft Offers Drivers High-Tech Traffic Alerts," *Seattle Times*, October 16, 2001.
- 31 [www.TrafficBee.com](http://www.TrafficBee.com)
- 32 Cynthia Pansing, Eric Schreffler, and Mark Sillings, "A Comparative Evaluation of the Cost Effectiveness of 58 TCMs," in *Transportation Research Record #1520*, Transportation Research Board, January 2000.
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- 37 Roy Young, "Carpooling with Co-Workers in Los Angeles: Employer Involvement Does Make a Difference," paper presented at ACT International Conference, Miami, FL, September 1994.
- 38 Strategic Consulting and Research, et al., "Evaluation of RCTC and SANBAG's Commuter Assistance Programs," prepared for RCTC, August 6, 1999.

<http://www.fhwa.dot.gov>

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